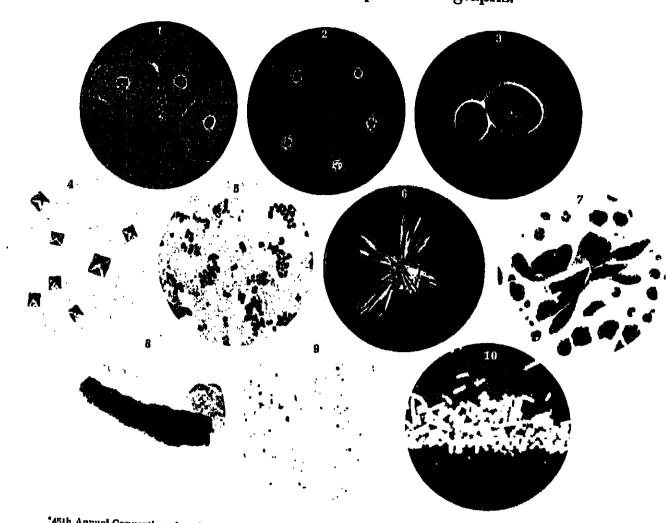
A question of identification

At a recent urology convention, physicians correctly identified 7 out of 10 of these photomicrographs,



*45th Annual Convention, American Urological Association, North Central Section, Detroit, September 22-25

	.			
	Calcium oxalate crystals.	Score vormeelf		
	Squamous epithelial cells.	Score yourself.		P. mirabilis, flagella stain.
	•	Answers appear below.		Calcium carbonate crystals
	Red blood cell cast.	Epithelial cells.	J==- ·1	
	Clusters of white blood (pus) colls.		11	Crenated red blood cells.
— —	cons.	E. coli, fluorescent stain.	[]	Malignant cells.

And when susceptible E. coli is identified, start with Gantanol' (sulfamethoxazole)

Gantanol (sulfamethoxazole) is dependable, basic therapy for patients with nonobstructed acute, recurrent or chronic urinary tract infections; i.e., pyelonephritis or cystitis.

Effective control of primary bacterial offenders
Susceptible E. coli, the most common cause of initial urinary tract infections, can be effectively controlled by Gantanol. Its antibacterial spectrum also includes susceptible urinary pathogens such as Klebsiella-Aerobacter, Staph. aureus, Proteus vulgaris and Proteus mirabilis.

Prompt antibacterial blood and urine levels—in from 2 to

Therapeutic blood/urine levels are reached rapidly, usually in from 2 to 3 hours after the initial 2-Gm adult dose, then maintained easily with Gantanol Tablets or the pleasant-tasting Gantanol Suspension.

Rifective in chronic infections

The elderly and debilitated not uncommonly develop nonobstructed chronic or recurrent pyelonephritis or cystitle-which sometimes is difficult to eradicate. Often these infections, when due to susceptible organisms, can be con-

12 hours of therapy with every dose

Either desage form of Gantanol given b.i.d. yields up to 12 hours of antibacterial activity... the around-the-clock coverage your patients need. Symptomatic improvement often comes 24 to 48 hours after the start of therapy, Guntanol, on proper dosage schedule, is generally well tolerated, with relative freedom from complications. However, the usual precautions during sulfonamide therapy should be observed, including maintenance of adequate fluid intake, frequent c.b.c,'s and urinalyses with microscopic examinations. It should be noted that the increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in shronic or recurrent u.t.i.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephrilis, pyelitis and cystilis) due to susceptible organisms (usually E. coli, mirabilis, and, less frequently, Proleus vulgaris) and in the absence of obstructive uropathy or foreign bodies. Note: Since in vitro sulfonamide sensitivity tests are not elsitivity tests with bacteriologic and clinical response. Add fonamides. The increasing frequency of resistant organisms sulfonamides, especially in chronic or recurrent urinary tract. Blood levels should be measured in entitle.

Infections.

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants the sulfonamide in congenital toxoplasmosis); pregnancy at the sulfonamide sulfonamide in congenital toxoplasmosis); pregnancy at warnings: Safe use in pregnancy has a sulfonamides.

Warnings: Safe use in pregnancy has not been estab-lished, and teratogenicity potential has not been thor-oughly investigated. Sulfonamides will not predent hor-prevent recorded. prevent sequefaet of group A streptococcal infections, i.e., chaumatic fever, glomerulonephritis. Deaths from hyper-other blood dyscrasias have been reported; early clinical may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide thorapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hebalic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient in-Maintain adequate fluid intake to pravent crystaliuria and

Adverse Reactions: Blood dyscrasias: agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methamoglo-binemia; aliergic reactions: erythema multiforme (Stevens-urticaria, serum sickness, pruritus, exioliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival allergic myocarditis; gastrointestinal reactions: nauses,

emesis, abdominal pains, hepatitis, diarrhea, anorala, pancrepititis and stomatitis; C.N.S. reactions: headack, peripheral neuritis, mental depression, convulsions, alaia, hallucinations, timitus, vertigo and insomnia; and miscellancous reactions: drug fever, chilla, toxic nephrost with oliguria and anuria, periarteritis nodosa and LE phenomenon. Due to certain chemical similarities with some golfrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused givernia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in

Dosage: Systemic suifonamides are contraindicated in stants under 2 months of age, except adjunctively with yrimethamine in congenital toxoplasmosis. Usual dosage as follows.

pyrimethamine in congenital Toxoplasmosis. Usual 000001 is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) b.l.d. or l.l.d. depending on severity of infection. Children—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab of teasp.) b.l.d. Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Buppiled; Tablets, 0.5 Gm sulfamethoxazole; Suspension.
0.5 Gm sulfamethoxazole/teaspoonful.

Answers: 4. Calcium oxalate crystals. 1. Squamous epithelial cells. 8. Red blood cell cast. 9. Clusters of white blood (pus) cells. 3. Epithelial cells. 10. E. coli, fluorescent stain. 5. A mirabilis, flagella stain. 6. Calcium carbonate crystals. 2. Crenated red blood cells. 7. Malignant cells.

In nonobstructed urinary tract infections due to susceptible organisms

Gantanol B.I.D. (sulfamethoxazole) Tablets/Suspension Basic therapy



Should Unly the Board-Certified Uperate? Pg. 8

Part II: ALERT on Upper Respiratory Infections, Pg. 23

Medical Tribune

@1972, Medical Tribune, Inc. 中意開始:

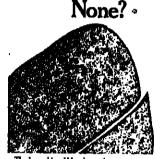
world news of medicine and its practice—fast, accurate, complete

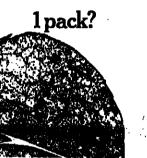
Wednesday, November 22, 1972 Vol. 13, No. 45

These...Are...Your...Lungs...

Show this to the patient who can't see what's so bad about smoking:

How much do you smoke?







½ pack?

Photos of whole lung sections show changes of pulmonary emphysema as related to amoking habits. Auerbach, O., et al. Relation of smoking and age to emphysema. New Eng J Med 286:853-7, 1972.

Doctor, if a thousand words have failed, try a picture. A copy of this is yours for the asking. Writer Smoking and Emphysema, HEW, Rockville, Maryland 20852

Here's how you can show your patient graphically what cigarette smoking will do to his lungs. The 8 x 10-inch poster above, prepared by the Public Health Service, shows the stepwise worsening of emphysema as the smoker increases his chronic daily use of cigarettes. Designed as a service to the profession to help educate patients in the hazards of smoking, the poster is available to physicians free of charge. It comes with explanatory material based on the pathologic and epidemiologic studies of Dr. Oscar Auerbach, of the Veterans Administration, and E. Cuyler Hammond, Sc.D., of the American Cancer Society. Write for your free copy to Poster, Medical Tribune, 880 Third Avenue, New York, N.Y., 10022.

'Cure' Is Held Possible In Most Child Sarcomas

Los Angeles-Management of soft-tissue sarcomas in children has reached the point where "cure" can be accomplished in many, if not most, cases, providing the cancers are diagnosed early enough, the seventh National Cancer Conference was

Detailing "great progress" in the treatment of soft-part sarcomas, the third

Toronto Study On Vitamin C **Backs Pauling**

TORONTO-The results of a large doubleblind trial have completely removed the doubts of a team of Canadian investigators regarding Dr. Linus Pauling's claims that vitamin C gives therapeutic protection against the common cold, a member of the



team, Dr. T. W. Anderson, Associate miology and Biometrics at the University of Toronto, told MEDICAL TRIBUNE. 'We were skepti-

cal of Dr. Pauling's claims when we started the trial," he said, "but the results

of the study have made that skepticism disappear." Dr. Anderson stated, however, that while "a firm recommendation" on the use of large doses of ascorbic acid in the prevention and treatment of colds cannot be made until certain questions are answered, "the results of our trial have encouraged us to conduct an even larger trial this winter to seek the answers to those ques-Continued on page 23

commonest group of solid tumors in children, Dr. Philip R. Exelby, of New York's Memorial Hospital for Cancer and Allied Diseases, said that fibrosarcoma management now has an "expected cure rate of about 90 per cent" with surgery alone, and rhabdomyosarcoma a cure rate of 60 per cent.

"It is gratifying in the year 1972 to be able to use the word 'cure' for these tumors,35 Dr. Exciby said, noting that, if un-

treated, most children with soft-tissue sarcomus die within 12 months of diagnosis. "We are now thinking beyond the cure of cancer to the these children," the physician continued. "This means we are cal treatment to be

less mutilating, preserving extremities wherever possible. We are designing radiation therapy fields and chemotherapy regimens so that cured children will not be crippled by the long-time side effects of these freatments."

He stressed that this does not mean

treatment is "any less radical" than hither-Continued on page 20

Tuskegee Study End Immediately Urged By Citizens' Panel

Washington—An immediate termination of the Public Health Service's 40-year-old Tuskegee syphilis study was recommended

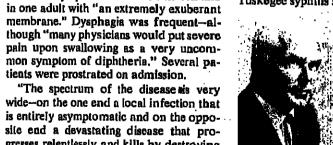
here by a nine-mem-

ber citizens' panel set

up to investigate the

study. And Dr. Mer-

lin K. DuVal, HEW



health and scientific affairs, said the recommendation would be implemented "as

rapidly as possible, Dr. DuVal also DR. DUVAL

backed panel recommendations that the surviving participants in the study receive any necessary medical care and that a Select Specialists Group be appointed to supervise treatment.

lowed disclosures that the majority of 412 syphilitic black male participants had not been treated even after penicillin was found to be an effective cure. Approximately 75 are still alive.

Continued on page 19

San Antonio Diphtheria: Surprises, Dilemmas

When diphtheria struck San Antonio, Tex.,

clinically it held surprises—and dilemmas. A yellow pharyngeal membrane? Diphtheria? But diphtheria is supposed to be distinguished by a greenish membrane.

"If I had seen these cases in the emergency room when I was in Denver I would never in my life have thought it was diphtheria," states Dr. Jerry J. Eller, head of pediatric infectious disease, University of Texas Medical School at San Antonio.

Yet during the 1970 diphtheria epidemic in San Antonio, a yellow membrane was a presenting sign in many patients who came to the affiliated Bexar County Hospital with what turned out to be diphtheria. And therapy in this lifethreatening disease rests on the clinical diagnosis. It still is a sign, during the winding down of the epidemic.

"We all learned a great deal clinically." states Dr. Richard V. McCloskey, then head of infectious diseases. "We began to inticipate complications."

Drs. McCloskey and Eller collaborated

in the care of all diphtheria inpatients in whom the lesion was not extensive. Dysp-Bexar County Hospital-connected by a nea was a symptom in several children and third-floor ramp to the medical school. "Disciplinary lines became blurred," says Dr. McCloskey. Although he was in the department of medicine and Dr. Eller in

No. 3: Infection Control Series

the department of pediatrics, they together worked out the management protocol for both the children and the adults who besieged the hospital with diphtheria. They frequently consulted on "results of cultures, how many family members of so-and-so we didn't get treated, how so and so is doing, what we should do with so-and-so," Dr. McCloskey relates. The hospital's isolation unit in medicine-on the 10th floor-that Dr. McCloskey headed accommodated older children from the overflowing special diphtheria ward set up in pediatrics—on the fifth floor.

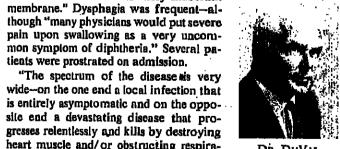
"The membrane," Dr. McCloskey pick up the disease very, very early and to learned, "may be small." Nausea, vomithad erased the anatomic boundaries." The ing, headache, and chills were among the presenting complaints even in those in

though "many physicians would put severe pain upon swallowing as a very uncommon symptom of diphtheria." Several patients were prostrated on admission. "The spectrum of the disease is very wide-on the one end a local infection that is entirely asymptomatic and on the opposite end a devastating disease that progresses relentlessly and kills by destroying heart muscle and/or obstructing respira-

Sometimes at admission "the child is coughing up blood and chunks of membrane dislodged by the coughing, is short of breath and exhausted."

Another observed phenomenon in San Antonio was a unilateral or bilateral swelling localized in the upper portion of the neck, with the area "looking as if someone" "erasure edema"—the description coined Continued on page 12

What's New and Important in Treating Cour? Dr. John H. Talbot Responds to Disertons Pers



The probe of the Tuskegee study fol-PHS maintained "a continuous policy

team of investigators at the University

The TKP procedure, they said, seems at

this time to be safer, easier, and cheaper

and, should the necessity arise, does not

preclude keratoplasty, "Even more, it elim-

inates most of the classical complications

in penetrating keratoplasty, such as graft

reaction, poor healing, wound dehiscence,

and fixed dilated pupils," the investigators

told a meeting here of the American Acad-

emy of Ophthalmologists and Otolaryn-

gologists. Visual acuity and ability to tol-

erate contact lenses after the procedure,

they added, seem to be at least as good as

would be obtained after penetrating kera-

10 Patients in Their Study

atoconus in whom visual acuity could not

be corrected by conventional methods and

who preferred the new experimental pro-

cedure as an alternative to penetrating ker-

atoplasty. They were legally blind, with

20/200 vision or less in the affected eye.

Half could see only sufficiently to detect

hand movements or count fingers; at least

five of them were unable to tolerate con-

In the procedure, with visualization

through an operating microscope, the ther-

mokeratophore, or heating probe, is ap-

plied to the desired site, which continuous-

ly receives normal saline, the investigators

explained. After the desired flattening of

the cornen, the operation is halted and the

burned epithelium is removed with a ster-

fle cotton swab applicator. In most of the

in the eye after previous soaking in neo-

Recently, they noted, the same tech-

without retrobulbar anesthesia or surgical

Medical Tribune Report

SAN FRANCISCO-A look at the white blood

count can help differentiate hepatitis from

Obstructive jaundice, a computerized study

by Dr. Dennis Venzon at the Penrose Hos-

He also found that, contrary to widely

pital, Colorado Springs, has shown.

tact lenses.

In their study were 10 patients with ker-

of Florida College of Medicine.

Keratoconus Treatment

Gives Favorable Result

Dallas, Tex.-The treatment of keratoconus by a new technique, thermokerato-

plasty (TKP), which consists of the application of heat to the cornea to shrink its

tors said.

Counterpulses

Aid Prognosis

In Shock Cases

SAN FRANCISCO-A noninvasive, short-term

method of counterpulsation external circu-

latory assistance has produced a marked

improvement in the prognosis of patients

in cardiogenic shock, the American Col-

Dr. Harry S. Soroff, director of surgical

services at Tufts University, added that the

method may be of use in infarction pa-

tients not in shock, as well as in angina pa-

In a series of 25 patients in cardiogenic

shock, Dr. Soroff said, 13 died, a mortality

of 52 per cent. Previously, he observed, the

expected death rate, despite "rigorous med-

In the counterpulsation procedure, the

legs are encased in rigid metal housings

that have a water-scal system. Pressure on

the limbs within the housings is synchro-

nously pulsated from 250 mm. Hg above

room pressure on diastole to 50 mm. Hg

able the left ventricle to discharge a greater

stroke volume with less effort. Addition-

ally, the elevation of the diastolic pressure

preferentially increases coronary blood

flow. Systemic circulation is augmented,

and cardiac output and peripheral perfu-

The effect, Dr. Soroff explained, is to en-

ical management," was 85-90 per cent.

lege of Surgeons was told here.

Medical Tribune World Service

PRAGUE-Liver damage found in patients operated on for duodenal ulcers or following Billroth resection of the stomach cannot be attributed to surgery, according to Prof. E. H. Schriefers, of the State Hospital, Koblenz, West Germany. On the contrary, he believes that surgery may have a protective influence.

He reached this conclusion, reported to the 14th Czechoslovak Congress of Gastroenterology here, on the basis of a study of 1,000 patients from various clinics who had been operated on for gastric or duodenal ulcers or both and 250 ulcer patients who had not undergone surgery. One or more liver biopsies had been carried out in every case.

Pathologic Changes Found

Pathologic changes in the liver were found in 286 (28.6 per cent) of those who had been operated on (hepatitis 12.7 per cent, fatty degeneration 12.2 per cent, cirrhosis 3.7 per cent) and in 48.8 per cent of nonoperated patients (hepatitis 9.2 per cent, fatty degeneration 32.8 per cent, cirrhosis 6.8 per cent). Consequently, the operation could not be held responsible for the damage, he said.

Possible pathogenic factors that might explain the liver damage in the first group were preoperative hepatitis (10 per cent), postoperative hepatitis (25 per cent), bileduct disorders (9 per cent), alcoholism

Typhus Decreasing in Burundi, But Rate Is Still World's Top

Medical Tribune World Service GENEVA, SWITZERLAND—The incidence of typhus in Burundi fell by half between 1970 and 1971, but it was still the highest in the world, according to the World Health Organization here.

The country reported 7,500 cases last year. Its Government is being advised on typhus control by the WHO, as is neighboring Rwanda, which had 1,300 cases. Ethiopia has reported between 2,000 and 3,000 cases every year since 1950.

Mexican Cardiologist Attacks 'Obsession' With Cholesterol

MADRID-A sharp criticism of the "current obsession" with cholesterol, particularly in the United States, was made here by the head of Mexico's National Institute of Cardiology.

they do not cure angina pectoris, hypertension, heart-failure, and cardiac insufficiency," Dr. Pedro Sodi Pallares told the sixth European Congress of Cardiology here.

said, "is sodium, rather than cholesterol. Potassium choride is the heart's best

(29 per cent), rapid emptying of the stomach after Billroth resection (20 per cent), bleeding and perforation of the ulcer (28 per cent), and diabetes (8 per cent).

A CONTROL OF THE PROPERTY OF T

In the group of 714 surgical patients in whom there was no or almost no liver damage, the incidence of all these factors was considerably lower except for preoperative hepatitis and rapid emptying.

In 141 postoperative patients, in some of whom surgery had been performed as long ago as 22 years, and in whom two to four biopsies had been carried out in the follow-up period, Dr. Schriefers found that the liver had improved in 77 cases, remained unchanged in 52, and was worse in only 12.

Coauthors were Drs. A. Luchmann and U. Hardt,

Ketamine May Increase Pressure Of Uterus in Early Pregnancy

Medical Tribune World Service Kyoto, Japan-While halothane and methoxyflurane relax the muscle tone of the uterus during the eighth to 18th weeks of regnancy, ketamine has the opposite effect during this period, a study presented here confirms.

In a paper to the fifth World Congress of Anesthesiologists, Dr. Samuel Galloon, of the University of Toronto, reported that uterine pressure was measured in 25 patients having abdominal hysterectomies for termination of pregnancy in the eighth to 18th week of pregnancy.

Recordings of uterine pressure in all 12 patients given ketamine alone showed that as soon as the drug was administered, the base-line pressure increased markedly and frequency and intensity of individual contractions increased.

A depressant effect on uterine pressure was consistent in all patients given I per cent halothane or 0.5 per cent methoxy-

Medical Tribune World Service

TEL Aviv, ISRAEL-Spontaneous abortion

is often due to histoincompatibility be-

tween husband and wife, Isaac Halbrecht,

head of the department of obstetrics and

gynecology of the Sharon Hospital in

nearby Petah Tikva, told an International

Seminar on Gynecologic Endocrinology

Dr. Halbrecht, who is also Professor of

Obstetrics and Gynecology at the Tel Aviv

University Medical School, based his pro-

ject, being conducted at Sharon Hospital,

on the following premises: a fetus is a

"homograft" containing antigens and

should theoretically be rejected by the

mother; in most cases it is not rejected

due to a protective mechanism that begins

functioning when the mother becomes

and Reproductive Physiology.



in techniques of restoration of fingers and hands is reported from a research and clin ical microsurgery program at St. Vincent llospital here.

In the last two years the team has applied microsurgery to restore 27 amputated fingers and four amputated hands.

The research leader of the team is Dr R. C. Bennett, Professor of Surgery at the University of Melbourne, and the clinic heard is Dr. B. O'Brien, of the hospital's department of plastic surgery.

A key feature of the work has been the development of a delicate nylon threat with a sharp metalized tip that is used in stead of a separate needle to avoid upon essary damage in sewing the tiny vesses under the operating microscope.

Operation Takes 8-10 Hours

Each operation takes from eight to # hours and requires at least six person p (four surgeons and two operating-thesis nurses). Usually, the work proceeds in to teams, one preparing the severed part and the other the patient. Generally, ax a eight sutures are used for each severed vessel or nerve. In the first operation, & culation is restored to the severed par, and later operations are programmed a repair tendons and bones.

Dr. Bennett commented: "I think the results so far have been very useful from the viewpoint of functional restoration Considerable partial restoration of sense . tion and movement has occurred in some patients, particularly in the fingers, and it now remains to assess the long-term results very critically because improvementish

Horn Honkers Restrained

Madrin Vehicle horn blowing will be prohibited here beginning July 1. The baj follows an antinoise campaign in which physicians played a major role.

In the transition from medieval barberargeon to 19th-century universitytrained surgeon, military medical personnel in Europe were given the name Feldsher, German for field barber. Their appearance was not unlike this 17th-century Feldsher, which is on

display at Zürich Medical Museum.

Japanese Warned of Ultrasonics In Treating Expectant Mothers

Medical Tribune World Service Tokyo-Japanese obstetrleians and gynecologists have been warned against the use of ultrasonic diagnostic apparatus when treating expectant mothers during the first three months of pregnancy.

The warning, by the Japan Association for Maternal Welfare here, followed a report from Hokkaido University School of Medicine that such devices induced birth defects in mice.

The Hokknido investigators found that three out of 51 mice treated with a commonly used ultrasonic device in early pregnancy gave birth to anencephalic offspring.

Histocompatibility of husband and wife

was determined by using a joint husband

and wife lymphocyte culture-the same

method used to determine the compatibil-

Tendency to Abort Foreseeable

ity of transplants.

brecht said.

Histoincompatibility Tied to Fetus Rejection pregnant; and habitual abortion indicates tion, the percentage increases manyfeld

a pathologic breakdown of this protective anywhere from 10 per cent to 30 per cent The same results were found in hydridiform moles, in which transformation tests proved to be positive. Moreover, complement-fixing antibody was found probably due to a new antigen that had been formed in the pathological placent of hydatidiform moles, Dr. Halbrechi re

Tests showed that when the lympho-"At present, we have no advice to offer cytes of husband and wife were incompacouples who are histoincompatible," 12 tible, the wife often suffered habitual aborcommented. "The research project is con ! tions. Moreover, and most important, her tinuing with special interest to discorn tendency toward habitual abortion could how the protective mechanism which provent abortions acts."

determined before marriage, Dr. Hal-Understanding it may have implica-"As a rule, only 3 to 4 per cent of the tions not only in the field of transplants small lymphocytes develop into blastlike but also for the problem of cancer rejeccells," he said. "In cases of habitual abortion, he said. CLINICAL NEWS NOTE: "A satisfactory response to a full course of colchicine, the dem-

MELVILLE, N.Y.—The possibility that gonorrhea may be one of the "inciting agents" that lends to cervical cancer is suggested in a report issued here by the National

Cancer Cytology Center. Observations made of seven patients with proved cervical gonorrhea were cited as evidence for this hypothesis by the au- cervical dysplasia and virus activity. Cell thors of the report-Drs. Carl T. Javert, of

-release from the University

control over proofreaders. (Regular beat: Immaferia Medica, page 21.)

collagen fibers, achieves results that are "most satisfactory" and that compare "very favorably" with those attained by penetrating keratoplasty, according to a preparation. The postoperative course has been uneventful with only minor discomfort for about 24 hours. Only aspirin was used as an analgesic in most patients. No cases of infection, recurring ulcers, or severe uveitis have been seen, the investiga-

> In all cases the cornea was significantly flattened, to less than 40 diopters by keratometric readings. Optical correction, usually in the form

of a contact lens, was given most patients by the third to sixth postoperative weeks, they reported.

Because the temperature, site and duration of application, and follow-up varied significantly in the patients, results were divided into two main groups.

In all five patients treated with 130° C. probe temperature with a short-time application and who were followed from eight to 12 months, visual acuity improved to better than 20/40 with contact lenses, it was reported. The investigators cited the case of a 23-year-old man, with a 13-year history of keratoconus, whose visual acuity in the left eye was sufficient only to count fingers and who had extreme difficulty wearing hard or soft contact lenses. Nine months after TKP treatment, visual acuity was 20/20 with a soft contact lenses. "The cornea was flattened at least 13 diopters in both meridians, with a parallel reduction of the refractive error of about 15 diopters," they reported. They added that there is little if any corneal haze after the pro-

In five patients, treated with a temperapatients a Griffin bandage lens was placed ture of about 90° C. with a longer time of application, who were followed for less than six months, visual acuity was also improved to 20/40 or better with contact nique has been performed at a slit lamp

Hepatitis, Obstructive Jaundice Told Apart

the differential diagnosis.

The results, however, were not as pre-

serum bilirubin is of no value in making

Speaking at a meeting of pathologists



Flat-tipped heat probe, top, ready to be applied to bulging conc-shaped cornea in thermokeratoplasty procedure. Bottom, reshaped cornea after application of probe. More spheric cornea improves vision and

dictable, the investigators said. "Since there was a considerable flattening of the cornea with time in our first group, a definite conclusion cannot be made at this time. However, it seems that the results obtained with the lower temperature and longer application are no as predictable,"

Side Effects May Be Seen

The investigators cautioned that new side effects due to the TKP procedure may be seen with longer follow-up. They added that while the procedure shows promise. "until the techniques are further developed and the patient observed for a longer period of time, its use should be restricted.'

The authors are Drs. Antonio Gasset, Edward L. Shaw, Herbert E. Kaufman, Motokazu Itoi, and Takashi Sakimoto and

ones had obstructive jaundice and which

"This does make sense, however, be-

Yasuo Ishii, a technician.

held opinion, the per cent of conjugated line phosphatase" in determining which

had hepatitis.

sion increase, with no energy cost to the Effective for Moderate Shock

"It was our impression that those who died were in somewhat more profound

The counterpulsation treatment, Dr. So-

He noted, however, that there were no mean age, size or location of infarct, or in-

Treatment of the 25 patients, with a portable unit on an emergency basis, Dr. Soroff said, began an average of eight hours after the patient entered shock.

the survivors was three hours. Although some of the patients were treated for as long as 24 hours, Dr. Soroff observed that "It really doesn't take much time, in those patients who are going to respond and survive, for them to show this."

preserved.

"We feel, and are organizing a study to mitted to the hospital."

Coauthors were Dr. Charles T. Cloutier. William C. Birtwell, Dr. John S. Banas, Dr. Alfred H. Brilla, Linda A. Begley, R.N., Phyllis Childs, and Dr. Joseph V. Messer.

Boston-A three-year, \$1,135,000 grant professions.

Medicine: pgs. 1, 3, 8, 9, 15, 18 Prognosis of patients in cardiogenic shock is held improved by noninvasive, counterpulsation circulatory assistance. . 3 Hepatitis may be distinguishable from obstructive jaundice by a look at the

health problems is said to be common

on quantitative urinary tract bac-

Pediatrics: pgs. 1, 15, 18

massive psychologic support15 Drug taking among children and adoleacents is discussed at an international

protection against the common cold receives support from a large double-

Surgery: pgs. 1, 2, 3, 9 Treatment of keratoconus by a new method called thermokeratoplasty is said to achieve satisfactory results 3

Practice of surgery should be restricted to board-certified surgeons, an official

FEATURE INDEX

In Consultation

Coming next issue: see page 5

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ECTOPIC BEAT

"Research experiments conducted by Prof. Leo DiCara of the University of Michigan Medical School show that humans may be able to acquire control over their visceral functions than medical authorities have previously suspected.

of Michigan

cians and Surgeons, and J. Ernest Ayre, president and medical director of the The appearance of cells in all seven

cases indicated an acute inflammatory process of nelsserian nature. There were numerous giant nucleated cells that exhibited features commonly associated with changes similar to those seen in infection with the herpesvirus ty were also observed.

Drs. Javert and Ayre pointed out that a of the cervix has been postulated by many investigators during recent years.

"It may well be," they said, "that the gonococcus exhibits some individual carcinogenic potential of its own or that it represents a viral vector playing an etiological role in the development of cervical dysplasia and carcinoma in situ of the

orrheal infection facilitates entry of the herpesvirus into the tissue cells, they said.

here. Dr. Venzon said that a retrospective cause obstruction leads to leukocytosis, and viral infections may lead to leukopenia." he observed.

study of 69 patients showed that, "surprisingly, the W.B.C. was as good as alka-The value of the W.B.C. has since been corroborated, he added, in 15 difficult Gonorrhea May Be an 'Inciting Agent' cases in which the computerized diagno-

sis was later confirmed by either biopsy or Leading to Cervical Cancer Incidence His study showed, he said, that the most

important criterion of all was age, with more hepatitis seen under age 44 and more obstructive jaundice over that age. For hepatitis, the mean age was 27.9, compared with 63 for obstructive jaundice.

Next to age in importance was the SGOT, with a mean value of 515 international units in hepatitis and 72 in obstruc-

The third most significant value was al-

kaline phosphatase, with a mean value of relationship between this virus and cancer 22.4 King-Armstrong units in hepatitis and 38.3 in obstructive jaundice. The fourth major criterion was the

W.B.C., which had a mean value of 6.310 in hepatitis and 8,690 in obstructive

Dr. Venzon said that these individual values should be considered in making the differential diagnosis of these two liver diseases, even without a computer, but that a computer profile of the four values is most helpful.

Dr. Venzon spoke at a joint session of the College of American Pathologists and the American Society of Clinical Patholo-



Medical Tribuna World Service

"Low-fat diets popular in the United States have a preventive action, but

"The main enemy of the heart," he

NEWS INDEX

Trial-and-error approach to personal among U.S. consumers9 Bacteriologie diagnostics are seen inadequate because of misunderstandings

onstration of hyperuricemia, a family history of gout, and the passage of a uric acid stone are helpful criteria [in the diagnosis of gout]." (Dr. J. H. Tulbott, page 5.)

Ob/Gyn: pgs. 2, 3 Gonorrhea may be one of the "inciting agents" that lead to the incidence of

Children who undergo reconstructive urologic surgery to provide the genitalia they lacked at birth are said to need

Research: pgs. 1, 8, 9, 15 Claim that vitamin C offers therapeutic

Now if we can only acquire some

In their view, the virus quite possibly rides in "piggy back" on the gonococcus. A plausible explanation might be that the acute; subacute, or chronic phase of gon-

can tolerate contact lenses.

clow on systole.

roff remarked, "appears to be effective for patients who are in moderate shock." shock than those who lived."

> significant differences between those who died and the survivor groups in terms of cidence of pulmonary infection.

The average duration of therapy among

Data from rabbit experiments suggest, he said, that "the earlier counterpulsation is applied, the more myocardium can be

prove this, that patients with myocardial infarction not in shock should have this treatment applied at the time they are ad-

Minorities' Training Financed at Harvard

Medical Tribune Report

has been received by the Harvard University Summer School from the Department of Health, Education, and Welfare to give minority-group students premedical training and career counseling in the health The grant provides the funds to support

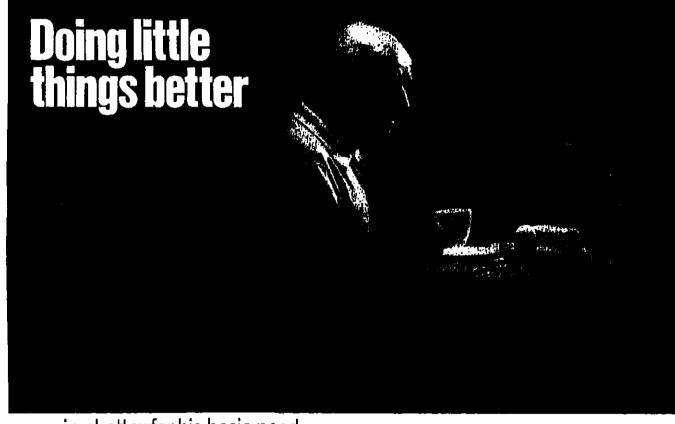
150 students each year in the eight-week program. In operation since 1969, it has been financed up to now by private foundation gifts and by the school itself. Its purpose is to make "medicine and dentistry viable, realistic career choices for the large number of students who might have the potential for such careers" but have not had the necessary encouragement, exposure, and academic preparation.

· Now that several agents are available to treat gouty arthritis, how do you rank them?

When should secondary hyperuricemia be treated with uricosuric agents or allopurinol if there has been no episode of arthritis?

A patient with leukemia and secondary hyperuricemia should receive 200-400 mg. There are several critical categories that of allopurinol daily in the absence of an probably should receive prophylactic therattack of arthritis. A modest hyperuriceapy. A young male under the age of 30 mia from one of the other blood dyscrasias with a strong family history and a serum uric acid above 9 mg. (assuming the lower or hyperuricemia following thiazide therapy should receive probenecid 1.0 Gm. limits of the gouty begin at 7.5 mg.) and colchicine 1 mg. daily and a liberal should receive probenecld 0.5 Gm, daily. fluid intake. All persons with uric acid above 10

If an acute attack of gouty arthritis develops in a patient receiving thiazide but not on antigout drugs, the patient may continue his thiazides without compromise and should suffer no inconvenience from acute attacks of gouty arthritis if the prophylactic regimen is started.

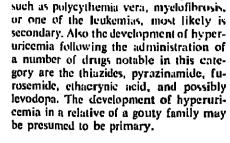


caring better for his basic needs, less confused in his thinking; no great accomplishment for most people, but a significant advance for the arteriosclerotic patient with cerebrovascular insufficiency

Hydergine®

SUBLINGUAL TABLETS containing 0.167 mg. dihydroergocornine methanesulfonate, 0.167 mg. dihydroergocristine methanesulfonate, and 0.167 mg. dihydroergokryptine methanesulfonate

The usual dosage is four to six sublingual tablets daily. The patient's improvement with Hydergine is usually demonstrated in four to six weeks. Some nasai stuffiness due to adrenergic blockade, transient nausea or gastric disturbances



When should primary hyperuri-

cemia be treated with uricosuric

agents or allopurinol if there has been no episode of arthritis?

mg. confirmed on two or more examina-

should receive 100-200 mg. of allopurinol

daily. Stone formers and those receiving

probenecid should be cautioned regarding

a liberal fluid intake to ensure a liberal

uricemia associated with a blood dyscrasia,

Clinical Professor of Medicine, University of Miami School of Medicine, Miami, Fla.

gout, and the passage of a uric acid stone

are helpful criteria. Osseous tophi in the

joints by x-ray and subcutaneous tophi evi-

dent on inspection are relatively late man-

ifestations and need not be anticipated

The differentiation between primary

and secondary hyperuricemia is evident

in a percentage of cases only. Thus hyper-

early in the course of the disease.

tory to treat of the several common types of joint disease.

The probability that phosphoribosyl transferase deficiency might play a role in

the etiology of gouty arthritis has not

The use of home dialysis or kidney been life-maintaining in a few instances.

in the metabolism and renal exchange of uric acid is expected, as well as the search by the pharmaceutical industry in perfecting newer drugs for the control of hyperuricemia or the management of acute gouty arthritis. I wish I could be as hopeful in other joint diseases, particularly rheumatoid arthritis.

How should one go about differentiating between primary and secondary hyperuricemia? When should the diagnosis of gout be

In searching for a diagnosis at the time of an initial attack of unexplained arthritis, the identification of urate crystals either free in the synovial fluid or engulfed within cellular elements plus a satisfactory response to a full course of colchicine 5-6 mg. over a period of 10-12 hours is most helpful. Most other antiarthritic or antiinflammatory agents are nonspecific. They may or may not provide relief similar to colchicine, but if relief occurs it must be attributed to a nonspecific action of the drug. The action of colchicine in acute gouty arthritis is specific.

In addition to the characteristic clinical features of an acute attack of gout (sudripheral joint in a male, with the cardinal signs of inflammation, redness, swelling, heat, and pain), a satisfactory response to a full course of colchicine, the demonstration of hyperuricemia, a family history of

COMING NEXT ISSUE

- Atheroscierosis fying child at high risk.
- Cirrhosis of liver
- Bronchitis

A THE OF ENDING MICH. What's new and important in treatment of gout?



INDICATION

CONTRAINDICATIONS

Based on a review of this drug by the Based and Academy of Sciences National Academy of Sciences National Research Council and/or other Infor-mation, FDA has classified the Indica

is follows:
"Possibly" offective: Mild depression
Final classification of the less-thaneffective indications requires further

Markerd anxiety, tension, and agliation dance Ritalia may aggravate these symp tones. Also contraindicated in patients

known to be hypersensitive to the drugam to patients, with glaucona.

WARNINGS
Ritality is not recommended for children and easy years, since safety and efficacyly through group have not been established. Some conflictern data on safety and efficacy of long term use of Ritalin in children with monitoral brain dyshum from are not yet available, those requiring long-term therapy should be concluded. Ritalian should not be used for severe department of either exegenous or endoa.

define such of either exequinous or endog-efficies tripen or for the prevention of nom-

falling states.
Ritalin may lower the convolsive threshy

in patients with or without prior seizures; with or wathout prior FFG abnormalities, even in about each of seizures, Safe concent

Lint use of interpretisants and Ritalinas and theen established. If seizures occur,

Ritatio should be discontinued. Use cautiously in patients with hypertensiv

Ritchin may decrease the hypotensive effect of guaranthaline. Use cautiously with present agents and MAO inhibitors. Ritalia

may inhibit the metabolism of coumain

antico.igul.ints, anticonvulsants (phenoba-tufal, diptu in Hydaritain, prinidone), pheno-butazone and troyelic antidepressants (imipranime, designatione). Downward de-age adjustments of these drugs may be e-quired when given concomilantly with Res

Osage in Pregnancy Artequate Jurial repreduction studies to establish safe use of Ritalin during preg-nancy bave not been conducted. Deretor,

until more information is available Rilates should not be piece intention womenof

childhe rang ago uniess, in the opinional thar physician, the potential benefits outweigh the possible risks.

Drug Depondence Ritalin should be given cauleusly to

emotionally constable patients, such as thuse with a firstery of drug dependence or alcoholism, ten auto such patients may be tence alosage on their and

futurically abusive use can lead to

marked tolerance and psychic depen-one evilte varying degrees of abnormal behavior. Frank tests hotic episodesia.

er tur, engarrially wifte parenteral abust preful supervision is required duting

drug withdrawal, then tovern depression well at the offer to at chronic order

re totaly com the unmasked. Long-lem follow up may be required becaused be

patient's basic porsunably disturbances

Patients with an element of agitation may teas t adversely; discontinuo therapy if

nerossary.
Periodo CHC and plotelet counts are nowced during prolonged therapy.
ADVERSE REACTIONS

itervausness and insomnia are the most

common adverse reactions but are utush controlled by reducing disage and only ling the drug in the afternoon or evening Other reactions include: hypersensitivity

(including skin rash, urlicaria, feret, at-throlgia, exfoliative dermatitis, and est-

therna muliforme with histopalhological tindings of nectubering vasculitis); anderly nausen; dissuress; polytallons; headachs; nausen; dissuress; polytallons; headachs;

nausen; dizzusen; pulpitations; headers; dyskineria; druwulnets; blood pressure and pulse changes, both up and down; tachy cordid; angina; cardiac purhylmias; abduminat pain; weight loss during prolonged therapy. In children, loss of appetite, abdering pain, weight loss during prolonged therapy, insumma, and tachycardia may occur more frequently. Toxic psychosis has been reported.

DOSAGE AND ADMINISTRATION

HOW SUPPLIED

Adults
Administer grally in divided doses 2 or

A times daily, preferably 30 to 49 minutes before means Dorage will depend upon indication and individual response. Average dosage is 20 to 30 mg daily. Some patients may require 40 to 60 mg daily. In others, 10 to 15 mg daily will be adequate. The few patients who are unable to steep it medication is taken late in the day should take the last dose before 6 p.m.

Tablets, 20 mg (peach, scored); bottles of 100 and 1600.

Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Strip Dispenses of 100, Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

CIBA Pharmaceutical Company

RECAUTIONS

anticongularits, anticonvulsants (phenob

Drug Interactions

The Consultant

DR. JOHN H. TALBOTT

THE DEVELOPMENT of allopurinol nearly a decade ago provided another highly useful drug in the antigout category which makes this disease the most satisfac-

been substantiated. The search for another enzyme deficiency associated with increased uric acid production seems unlikely but should not be dismissed.

transplantation in a patient with advanced renal insufficiency and gouty arthritis has

A continued concentration of interest

made?

The answer to the second part of the question is much easier than the first. A diagnosis of gouty arthritis should not be made in the absence of at least one typical attack of acute arthritis in one or more of the peripheral joints of the body. A relatively high incidence of the first acute attack in the great toe remains a clinical axiom. Clearly, one may observe acute attacks of gouty arthritis in the back, the hips, the shoulders, or the cervical spine, but these joints are affected only after the diagnosis has been well established for years and after many attacks in the toes, ankles, knees, hands, or elbows.

den onset of acute pain, usually in a pe-

- Guidelines advanced for identi-
- New technique controls bleeding of esophageal varices.
- Smoking plays greater role than dust exposure in miners.

It may be just a mild depression. But she needs help...and needs it right now.

Counsel and reassurance may suffice. But if you decide supportive medication is indicated, Ritalin can

offer prompt benefit. No need to wait days or weeks to begin feeling better. Ritalin improves mood and outlook, helps the

patient get moving again.

Ritalin is generally well tolerated, even by older or convalescent patients. And there's generally no need for long-term therapy. When Ritalin works, one prescription may be sufficient.

(methylphenidate)
helps overcome the inertia
of mild depression*

Division of CIBA-GEIGY Corporation Summit, New Jarsey 07901 B tions or a chronic urate stone former

Continued in next issue.

helps patients with cerebrovascular

insufficiency due to arteriosclerosis do little things better

have been reported with high dosages.



Excessive Anxiety in Duodenal Ulcer Patient...

The Somatic Protest

The contributory role of anxiety in the pathogenesis and exacerbation of peptic ulcers is well



established. Thus, excessive emotional tension and anxiety are believed to cause adverse changes in the physiology of the stomach or duodenum. Although the exact mechanism of these

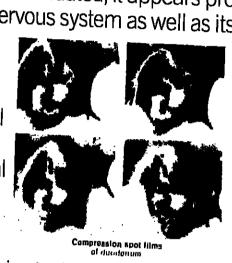
changes remains to be elucidated, it appears probable that the central nervous system as well as its

chief neural and humoral outflows are involved. In many patients with duodenal ulcer, gastric hypersecretion and intestinal hypermotility are the end-organ manifestations of these proc-

esses and usually give rise to the typical symptoms of duodenal ulcer.

Whenever immoderate, harmful anxiety is prominent in the clinical profile, consider -- in addition to primary therapy—the adjunctive use of Librium (chlordiazepoxide HCI) to





effect reduction of anxiety-linked gastrointestinal complaints or symptoms. Librium (chlordiazepoxide HCI) is used concomitantly with certain specific medications of other classes of drugs, e.g., anticholinergics and antacids.

Librium has an excellent record of effectiveness with safety. After more than 12 years of wide clinical use, experience with Librium continues to reflect its favorable therapeutic index. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. When excessive anxiety has been reduced to appropriate, tolerable levels, therapy with Librium should be discontinued.

> For moderate to severe anxiety adversely affecting gastrointestinal function

adjunctive Librium 10 mg (chlordiazepoxide HCI) 1 or 2 capsules tid/qid.

Before prescribing, please consult complete product information, a summary of which follows: Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Importhalamus

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g.,

operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended. If combination therapy with other psychotropics seems indicated carefully consider individual pharmacologic effects, particularly in use of potentiating drugs Such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of Impaired renat or hepatic function. Paradoxica

reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoaguiants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido-all infrequent and generally controlled with dosage reduction; changes in EEG

patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), laundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCI. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



Roche Laboratories Division of Holimann-La Roche Inc. Nutley, N.J. 07110



The following notes are from reports presented at the 58th annual clinical congress of the American College of Surgeons, held in San Francisco.

Ischemic Leg Scanning

Scanning with radioactive microspheres for predicting the potential for healing in an ischemic leg was described by investigators at Johns Hopkins University School of Medicine.

The procedure is based on the premise that microspheres labeled with technetium99m injected into the femoral artery are distributed to the distal capillaries in direct proportion to the blood flow, which can be quantitated by gamma counting scans. The ratio of counts bordering a lesion to counts 2-3 cm. away represents the patient's ability to develop hyperemia -"an essential part of inflammation and healing," they said.

Of 21 patients whose limbs were in eopardy, 13 demonstrated hyperemia in the area of ischemic lesions and all healed with conservative therapy. The other eight showed no increase in blood flow and seven had nonhealing or rapid progression of the lesion.

The authors were Drs. Timothy J. Gardner and N. David Greyson, Buck A. Rhodes, Ph.D., and Dr. G. Melville Wil-

Extensive Liver Disease

Oxygen needs should be considered in the management of patients with extensive liver disease or injury, according to Drs. Theodore R. Schrock and Thomas K. Hunt, of the University of California School of Medicine, San Francisco, who reported a study demonstrating that hypoxia impairs regeneration of the injured

The animals were subjected to 68 per cent hepatectomy and placed in a chamber with the desired amount of oxygen. Hypoxia, it was found, depressed DNA synthesis. Animals on 8 per cent O2 became severely acidotic and 67 per cent died. Those breathing 12 per cent O2 developed no acid-base abnormalities, and none died.

Dog Heart Transplant

Successful orthotopic transplantation of canine hearts after in vitro preservation for 24 to 28 hours was reported by investigators at the National Heart and Lung Institute, Bethesda, Md. Heretofore, they noted, success has been rare in hearts preserved more than 12 hours.

The hearts were preserved by hypothermic perfusion with an oxygenated electrolyte solution resembling extracellular fluid. All of seven consecutive recipients survived for 30 hours or more, and

three of these dogs survived to rejection. The authors were Drs. Jack G. Copeland, Michael Jones, Roger Spragg, and Edward B. Stinson.

Hepatic Surgery Eased

The carbon dioxide laser shortens the time of hepatic surgery and decreases ported by Cincinnati investigators.

Dogs were heparinized and underwent partial hepatic lobectomy to control hemorrhage produced by simulated blunt irauma. Liver incisions were made by the cold knife, the Bovie electrosurgical scalpel, or a focused high-output carbon dioxide laser scalpel. The laser showed superior hemostatic capabilities both in the speed of coagulation when compared to the cold knife and in total blood loss when compared to both the electrosurgical unit and the cold knife.

The investigators were Drs. James P Fidler and Richard W. Hoefer, Thomas G. Polanyl, Ph.D., Herbert C. Bredemeier and Drs. Vinton E. Siler (deceased) and William A. Altomeler!

TABLETS

IMPICATION Essential hyp CONTRAIND

Limit on Surgery to Certified Surgeons Asked said, "we would feel that a trained surgeon

is better than an untrained surgeon."

SAN FRANCISCO-The practice of surgery, the new president of the American College of Surgeons advocates, should be restricted to board-certified surgeons, and the number of surgeons should be limited. Otherwise, Dr. William P. Longmire told the College's Clinical Congress here,

the increasing number of new physicians being turned out by the nation's medical schools "may just further engorgo" a field of medicine that is already crowded.

"Surgery now is done by an amorphous mass of physi-

cians," said Dr. Longmire, who is Professor of Surgery and chairman of the department at the University of California School of Medicine, Los Angeles. "Some are certifled, and some are not."

According to some estimates, as much as being done by uncertified physicians.

of training, Dr. Longmire said.

Specialty board certification, "which is the best yardstick that we have available today," and fellowship in the American College of Surgeons should be the criteria

He proposed that the United States adopt a system similar to that followed by European countries, restricting the number of physicians who can enter specialty

Don't Go Whore Need Is

"We're tooling up and putting out these thousands of additional physicians," he said, "without any further control over what they do-they just become M.D.s." They do not go, he indicated, where the nced is.

For example, he remarked, despite the demonstrated national requirement for more family doctors, "success has not materialized" in the much-publicized campaigns to augment their number.

In California since 1969, he observed, there has been a 14 per cent drop-off half of all surgery performed in the U.S. is in the number of physicians in family or general practice, while a marked increase "I think that generally speaking," he has occurred in doctors in surgical spe- to other than board-certified surgeac

cialties, internal medicine, and pediate For surgery in particular, he tonmended, the number of physicians needs

to be performed in this country" show he calculated, and only as many as m necessary to meet that number trained

This could be done, Dr. Longmit sail by limiting the number of residencies proved through the residency review on mittees in each of the surgical specialise and by confining the practice of suga to board-certified surgeons.

Of the performance of surgery by motor certified physicians, the A.C.S. presses conceded, "I doubt if you can prosse this by law." He urged instead the inste tion of differential pay scales, such men in the military and Veterans Administra tion hospitals and in Canada. This work provide "an incentive to a man, if he was to do surgery, to become certified." Dr. Longmire said that such a diffe-

ential could be established through Rs. eral legislation, such as amendment Medicare and Medicaid laws. The nation health bill sponsored by Sen. Edward ke netly (D.-Mass.), he noted, include: provision prohibiting payment for suga,

Wednesday, November 22, 1972

Many Said to Have Haphazard View of Therapy

BETHESDA, Mn.-Millions of persons in this country make decisions on personal health problems believing that "anything is worth a trv."

This trial-and-error approach to such problems is the major underlying cause of questionable health practices in the U.S. population, according to the results of a national study released by the Department of Health, Education, and Welfare.

The study showed that millions of consumers base important health decisions on the idea that in the light of individual difference there is a chance that almost any treatment may be beneficial. Faith in this approach is reinforced by psychosomatic effects and unaided recovery, it was

Some highlights of the study:

 Older people are generally less likely than young people to make irrational decisions on health problems and are more skeptical about efficacy claims for drugstore remedies.

Forty-two per cent of the persons inter-

 Three-fourths of the public believe that extra vitamins provide more pep and energy, the most common of the misconceptions investigated in the survey.

 Although their disorders had never hemorrhoids, heart trouble, high blood

Twelve per cent of the sample also in-

Twenty-six per cent, representing about

000 adults, indicated they did something every day or nearly every day to help with

opinions was initiated at the suggestion of the Senate Committee on Aging after was supported jointly by seven Govern-

Dr. Merlin K. DuVal, HEW Assistant

"Too little is known about present-day human behavior in health matters. The report provides us with background for decisions in areas such as health and nutrition education and drug labeling."

The 426-page report, A Study of Health Practices and Opinions, was made by National Analysts, Inc., of Philadelphia. The study is based on data from interviews with 2,839 adults in a national area probability sample that was taken during the summer of 1969.

The \$157,000 contract for the study

brief summaries of editorials or guest ditorials in current medical journals.

Consumer Participation

"The medical profession has long recognized the value of joint effort with experts in other fields that have common boundaries with medicine in the delivery of health care." And "now that consumers...are becoming more involved in determining the cost, availability, and even the quality of medical care, the medical profession has new partners in decision making."

Recommendations made by a group composed of professional, consumer, and commercial interests "might be more realistic, or at least better accepted (even in allocating research funds), than those made by any of its component individuals or organizations....

"The community group might also contribute new ideas and information that would help to shape future medical education. Through dispassionate analysis, it might conclude, for example, that we ought to diminish our present emphasis on long and intensive training for all physicians and turn instead to producing more physicians faster, reserving the longer, more comprehensive education for a relatively few."

This group might also "choose whether money and personnel should be allotted to spectacular and well-publicized procedures or the kinds of treatment that are less celebrated but far more important medical and economically....Such choices might even be made on the strength of the same facts used by the medical profession in reaching the same decision, yet be better accepted because of the group's greater strength in public relations," Dwight L. Wilbur, M.D., editorial. (Postgrad. Med. 52:230, September, 1972.)

Smoking in Irish MDs

A recent survey of physicians in Ireland has indicated that physicians of both sexes smoked significantly less than the general population. There was also a higher percentage of ex-smokers in this group than there was among the general population.

The data are "encouraging. Doctors are gradually stopping the cigarette smoking habit or changing to other forms of tobacco, but this trend is evident among many other professional people and among university graduates in general. It is probable that the cigarette smoking habit started among the better educated people and among those in the more privileged social classes. They popularized a habit which spread widely to all segments of society. It is to be hoped that the example now being set by the professional classes and by the more privileged members of society will be followed with the same success by the entire community." R. Mulcahy, editorial. (J. Ir. Med Assoc. 65:446, September 2, 1972.)

Urinary Tract Infections Many remain unaware of the fact that

despite the most meticulous procedures in bacteriologic laboratories, bacteriologic diagnostics are often inadequate because of poor sampling, poor storage and transport, and misunderstandings regarding "quantitative bacteriology of the urinary tract." Suprapuble aspiration is an excellent method for the diagnosis and control of urinary tract infections. It solves most of the clinician's problems, be they in the hospital or in private practice. The clinician who has problems with "pollution" and does not achieve satisfactory results from urine sampling and control of urinary tract infections should adopt the aspiration method, either in the hospital or in private practice. J. Boe, editorial. (Tidsskrift for den Norske Laegeforening [J. Norwegian M. A.J. 92:28, October 10,

Medical Tribune Report cent thought such a medicine should be being victimized by frauds and misreprebanned by law. sentations. The purpose of the survey was

viewed, representing 50,000,000 adults. would not be convinced by almost unanimous expert opinion that a hypothetic

been diagnosed by a physician, 12 per cent of those interviewed representing about 16,000,000 adults, reported they had arthritis or rheumatism, asthma, allergies,

pressure, or diabetes.

dicated they would self-medicate-without seeing a doctor-for longer than two weeks for such ailments as sore throats, coughs, sleeplessness, or upset stomach.

35,000,000 adults, had used nutritional supplements expecting specific observable benefits, without a physician's advice. About 2 per cent, representing 2,500,-

powel movement and that they were not following a physician's advice. The research on health practices and

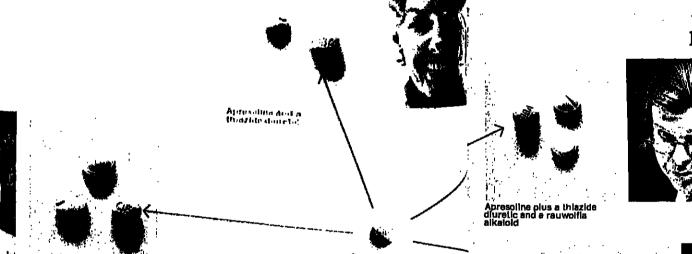
"cancer cure" was worthless. Only 45 per hearings on how elderly consumers were ment agencies.

to investigate false and questionable health beliefs and practices and the public's susceptibility to them.

Secretary for Health and Scientific Affairs,

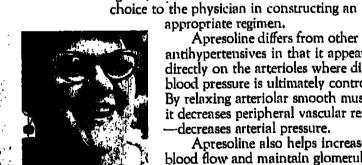
"The attitudes, beliefs, and practices of consumers in regard to health problems are critically important. They involve, for example, such questions as the limitations of self-diagnosis, how long self-medication is continued, and when to seek professional

Apresoline...antihypertensive idea (hydralazine) whostime has come A flexible approach that helps meet the goals of today's new therapeutic concepts

















filtration, and to maintain or increase cerebral blood flow. When Apresoline is added to existing regimens, dosages of each drug are usually lower than when used alone, thus tending to reduce risk of side effects.

Early and more vigorous treatment of

hypertension. More adequate control of blood

to individual requirements.

pressure. Antihypertensive regimens closely molded

An antihypertensive agent unique in its mode of

action, Apresoline can be combined, for added

control, with other antihypertensives—thiazide

appropriate regimen.

and nonthiazide diuretics, sympathetic-inhibiting

agents, and rauwolfia alkaloids. The result: greater

These goals can be met in part with Apresoline.

Apresoline differs from other available

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it decreases peripheral vascular resistance

Apresoline also helps increase renal

blood pressure is ultimately controlled.

By relaxing arteriolar smooth muscle,

blood flow and maintain glomerular

-decreases arterial pressure.

Apresoline (hydralazine)

Meets today's needs because it can contribute so much to so many antihypertensive regimens

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i Pregnancy
i there has been no adverse experience
resoline in pregnancy, the deug should b
illy when, in the judgment of the
an, it is deemed essential to the wasters ly arlery disease; mitral

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Robert E. Gundel, M.D.

Medical Director The Purdue Frederick Company

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The Only Independent Medical Newspaper in the U.S.

Medical Tribune

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Vitamin C for the Common Cold Vindicated

Owing to the combination of fewer episodes and fewer days per episode, the difference between the groups was marked in terms of days per subject, particularly days confined to the house, in which the mean figure for the vitamin group was 30 per cent lower than that for the placebo group, a difference which was stat!stically significant (P<0.001)."

This was the essential finding of an exquisitely well-controlled, randomized, double-blind trial of the utility of vitamin C as preventive and therapy for the common cold, reported in the September 23 issue of the Canadian Medical Association Journal (see page 1). It was carried out by Dr. T. W. Anderson, Associate Professor, Department of Epidemiology and Biometrics at the University of Toronto; Prof. D. B. N. Reid, of the same department; and Prof. G. H. Beaton, head of the Department of Nutrition at the same institution.

For some years Nobel Laureate Linus and gains many followers." Pauling has cited "scientifically valid evidence" that vitamin C, "taken in proper amounts, has the effect of decreasing the incidence and severity of the common cold, whereas the ordinary cold medicines that amazing category of striking new addo not have this effect." Pauling has said, "I find it shocking that physicians and nutritionists should misrepresent the facts the Toronto study themselves admit that

of this important food, vitamin C, in improving health."

Of course, Dr. Pauling is a chemist, not a physician, and his two Nobel Prizes are for chemistry and for peace. His scientific acumen is legendary, and it would seem foolhardy to question his ability to recognize and distinguish valid from invalid data. He has not performed any of the edical studies but has singled out a number as "well-designed investigations" that demonstrated to his satisfaction the utility of vitamin C for the prevention and treatment of the common cold. Nontheless, his medical critics have attacked the studies he has selected as "uncontrolled or inadequately controlled." Indeed, a "Current Opinion" guest editorialist in the September 15, 1971, issue of MEDICAL TRIBUNE. in the course of labeling acupuncture as "a powerful placebo," referred to "a ominent scientist in an unrelated field who I on dubious evidence extols the virtues of vitamin C for the common cold

It will be extremely difficult for such critics to label the Toronto study as "dubious evidence." It seems likely that the vitamin C controversy will also wind up in vances that are at first treated with derision by contemporary scientists. The authors of and should refuse to recognize the value they came to scoff but remained to praise.

Educating Your Patients

IN SEEKING TO MOBILIZE government two of the most toxic substances to which educational action against major killers man is exposed, has led to the search for and disablers, the Public Health Service is preparing ads designed to help the physician educate his patients.

The most recent of these is an informapage 1). Intended to serve as a teaching tool for use with patients, the PHS poster shows in vivid detail—explainable to a laymen-the dramatic anatomic changes occurring in emphysema and their relalation of anatomic defects with the number of cigarettes smoked daily makes a crucial

PHS in making these posters available to scription blank addressed to its inception, consistently backed the need to recognize new priorities in public health measures. The clean-cut relationship of cigarette smoking, not only to heart disease and lung cancer, but to emphysema as well, has caused growing concern in medical and government circles throughout the world. The failure of educational programs to reduce smoking and alcohol ing and lung disease by Dr. Oscar Auerbach use, both of which have been identified as and E. Cuyler Hammond, Sc.D. A.M.S.

new means to arrest the continuing and growing medical toll exacted by these two

The PHS antismoking poster marks a tive poster on the hazards of smoking (see new approach, invoking the direct aid of the physician and offering him a tool for reaching the patient in his office. The personal authority of the physician and the ambience of the office visit, combined with the object lesson offered by the poster, tionship to cigarette smoking. The corre- all suggest that this may prove to be an exceptionally useful way to bring the patient a vital lesson in preventive medicine.

The poster is available free of charge to We are pleased to cooperate with the all physicians, and a letter or your pre-

> Medical Tribune 880 Third Avenue New York, N.Y., 10022 will bring you a copy or copies, in accord with your request. This important educational material comes with an explanatory summary based on the internationally recognized studies of cigarette smok-

External Counterpulsation

coronary occlusions may reduce the size of meeting; see page 3.)

CLINICAL QUOTE " ... External counter- the permanent injury, improve the course upulsation is a practical, safe, atrau- of recovery, and reduce the incidence of matic, and effective circulatory assist cardiogenic shock..." Dr. Harry S. Sotechnique. Early treatment of patients with roff at the American College of Surgeons



"A breakthrough at last! We've Just made a cold germ nervous."

The Tail That Wagged the Medical Education Dog

Editor, MEDICAL TRIBUNE:

Thanks for your splendid editorial on the full-time professor (MEDICAL TRIBUNE, September 13). I could not agree with you more. I think a perfectly horrible thing is happening in the teaching of medical students today. They are being taught usually by the junior staff and residents and seldom come in contact with the heads of departments or even those of the next echelon. Too many of the senior staff are too busy doing research or traveling, much of which is not worth while. All of us believe in research, but to let the tail wag the dog, as is now happening, and lcave the poor undergraduate student stranded does not lead to good medicine.

Thanks again for your splendid editorial. I hope it will do some good . . , but I fear it may fall on deaf ears.

ALTON OCHSNER, M.D.

New Orleans, La.

Athletes' Osteoarthritis

Editor, MEDICAL TRIBUNE:

Regarding your article on the osteoarthritic problem in athletes (MEDICAL TRIBUNE, October 11), I might add that I enjoy so much the continuing, up-to-date MEDICAL TRIBUNG reports on athletics. I think it does a world of good to hear what others have to say.

I'm not quite in agreement with Dr. Morehouse in that he found no relation to knee instability and ligamentous tearing. I feel that Dr. Morehouse's study, though commendable, did not include other parameters of rotation and of the tibia. Measurements of simple instability in the horizontal plane simply don't tell the story, and I think that the test that we've used to designate loose joints are designed to show all rotational laxity with high or low extremity. Combining extreme flexibility at the hip and ankle on top of some looseness in the knee, in my opinion, does predispose to ligamentous tearing, especially if the patellar tubercle rotates beyond the interal margin of the patella.

I would agree completely that one type of instability-namely, mediolateral faxity -is not, in itself, an indicator of the potentiality of knee injury, but I can't help feeling that progress continues to show that, when there are three or four parameters of laxity indicative of marked total low-extremity laxity, the ligamentous injury rate is much higher. Studies in the future of this type would be more conclusive if one could

study the rotational laxity of the ankle, knee, and hip in an effort to see if one then finds more ligamentous injury.

JAMES A. NICHOLAS, M.D. New York, N.Y.

Exercise and the Heart

Editor, MEDICAL TRIBUNE:

I would submit that your recent editorial "Exercise for the Heart-an Act of Faith?" is itself an appeal to emotions and faith rather than an understanding of research data available to any interested reviewer. The writer has conveniently swept all of the questions regarding exercise therapy into one pile and declared the whole pile unproved. Had he been careful enough to research his comments, he would have clearly seen that many of the questions are now resolved.

Certainly no responsible leader in this field ever suggested that exercise by itself reduces atherosclerosis; nor have they claimed that it prevents coronary heart disease, extends life, or prevents recurrence once the disease is manifested. Parenthetically, there is epidemiological and statistical evidence suggesting such results. These are long-term, hoped-for goals.

On the proved side, however, many short-term effects of exercise therapy are now quite well known. Oxygen requirements of myocardial work fall with the drop in resting and exercise heart rate and blood pressure—a very clear-cut benefit to the coronary patient, particularly the one with angina. Work capacity increases. as does cardiac stroke volume and maximum oxygen uptake. Glucose improves, triglyceride levels may drop, and the efficlency of the peripheral blood distribution and return increases. There are other known effects as well, but the improved pabeing frequently are the best results from the patient's standpoint. Though the writer makes light of these psychologic benefits, they are so real and dramatic in so many patients that they stand by themselves as a prime reason for exercise therapy.

In the years past, we used insulin with great patient benefit for its short-term effects alone. We hoped it would prolong life and reduce atherosclerosis. It now appears to do neither, yet we used insulin for the results it did provide. I suppose there were physicians at that time, too, who condemned its use, preferring to beat their breasts about the unknown rather than apply the known for their patient's

> FRANK W. JACKSON, M.D. Harrisburg, Pa.

ARTHUR M. SACKLER, M.D., Hernational Publisher, Medical Tribu



Space-Time Links

RETURNING FROM THE INAUGURATION of a new medical school, my jet passed over the fabled isle of Cos. A con-trail was linking in space the island birthplace of Hippocrates with the Paris of Pinel. Hippocrates of Cos and his colleagues of the fifth century B.C. were "migratory" physicians. As he traveled, Hippocrates not only rendered patient care but was constantly teaching. I couldn't help but recall Arthur Master's recent

comments on the "full-time professor," whose travels and guest lecturing have left such a gap in medical education that "interns and residents in the hospitals... are being neglected" (MEDICAL TRIB-UNE, September 13).

In Paris, in 1792, the Ecole de Médecine of the university was reopened following a series of disturbances and, with its reopening, dropped one of Hippocrates' great admirers, the now historic medical "great," Philippe Pinel. Pinel, the son of a poor country G.P., was a quiet and re- 1. Every individual has the right, at his served ex-divinity student who didn't begin the study of medicine until after he was 30 and after a stint in the natural sciences. For him medicine had to fulfill the same criteria as zoology and mineralogy. Infected by the contagious influence of Linnaeus, he used acute clinical observation and an analytic approach to symptomatology to create a new nosology.

Transforming Penitentiaries

I had referred to Pinel as father of the social psychiatry of today in Yugoslavia, 1970, in my address as chairman-elect at the third World Congress of Social Pay- in action of so many of us who have folchiatry. Pinel had been deeply moved by a pamphlet in which Mirabeau, in 1788, had described the condition of the mentally sick at Bicêtre. "The new inmates are heedlessly flung into this wild rabble of lunatics, and any ragamustin who comes along with a few sous in his pocket can be gratified by the sight of the menagerie." Four years later, Pinel was appointed superintendent of the Bicêtre. He went in person to convince the French deputies that the "insane" were entitled to the rights of man, that they should be treated as the ordinary sick. The French Revolution brought freedom of a kind even for the insane. As Sigerist put it, "What had been penitentiaries were transformed into hospitals."

How Many Hundreds of Years...

How many hundreds of years will pass before we take the next necessary steps in our approach to mental disease? At the fourth World Congress of Social Psychiatry this year in Jerusalem, I had been sensitized to the fact that we still, even as physicians, stigmatize "patients." I had personally reacted with shock when Vladimir Hudolin of Yugoslavia suggested that patients be represented on the governing bodies of our Association. I was ashamed

at my own backwardness when he pointed out that ex-alcoholics and recovered schizophrenics could make unique as well as significant contributions. I then backed Hudolin's proposal, but I failed to go for-

I should have introduced a series of resolutions articulating the "rights of man" in respect to mental and emotional disorders. There were three points that could and should be established:

The "Rights of Man"

election, to prophylactic and therapeutic mental health care.

2. Individuals receiving such care have the right to be represented in their treatment by family or physicians or other surrogate. 3. No individual should lose any of his civil rights by virtue of his being a reciplent of such treatment.

Hospitals Made Penitentiaries

When I think of my failure to bring these motions to the floor, I note the contrast between the historic boldness of the reserved and timid Pinel and the timidity

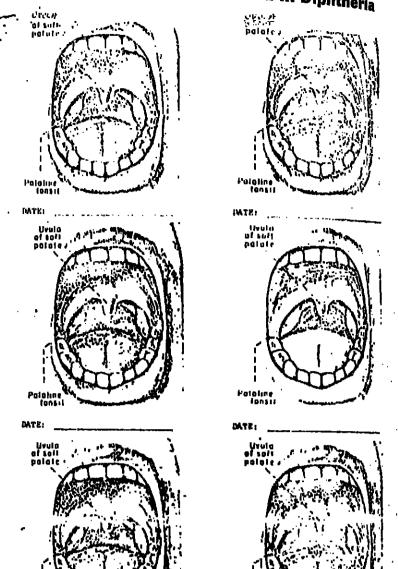
Consider, also, an incredible time linkage in respect to mental disease. Today, members of the U.N. are considering an international convention on psychoactive substances which will place the stigma of criminality on psychoactive agents and will shackle psychopharmaceuticals with police strictures. The U.S. Senate has deferred action on this international convention—and rightly so, because it is retro-gressive legislation. But the swing of the wheel of history relates to more than drugs alone as we sadly note that, whereas the French Revolution transformed penitentiaries into hospitals, we are now witnessing the conversion of some mental hospitals into penitentlaries.

EPIGRAMS--Clinical and Otherwise

Don't despise empiric truth. Lots of things work in practice for which the laboratory has never found proof. Martin H. Fischer (1879-1962)



Patient's Progress Charted in Diphtheria



On rounds of diphtheria patients at Bexac County Hospital, San Antonio, Tex, loss staff sketched location of membrane on a diagram of phary ugeal area. Attached load patient's chart was a sheet of these diagrams. A look at the sheet gave a rough ideal progress. An extensive membrane was considered a signal of possible airway obtract

age in respect to mental disease. Today, 180 years after Pinel struck the shackles from the limbs of the mentally sick, the Surprises and Dilemmas

Continued from page 1 there-was different from the classic "bullneck" seen in diphtheria.

At first, though, Bexar County Hospital physicians had to proceed from at hest limited (in the case of Dr. McCluskey) or no more than textbook (in the case of Dr. Eller) knowledge of the disease. The pediairle "front lines," as Dr. Eller puts it, were led by a physician without any experience with diphtheria who became chief pediatrics resident as the epidemic was coming to a head, Dr. Susan E. M. Richards, "We had to learn things as we went along," Dr. Eller recounts, "We sturted off by following guidelines that had been set by serial dilutions of diluted antitoxin. down in years past and ended up modify-

Dr. McCloskey relates: "The first thing we did was to make sure that we had adequate supplies of antibiotics and antitoxin on hand to treat these people. Because this is an uncommon disease, the antitoxin that's used is generally not available in great quantities. We cleaned out the local supplies very quickly, and our pharmacist had to order the horse serum from the National Drug Company Itself."

How much antitoxin to administer to eradicate the toxemia was difficult to settle. "We ended up," says Dr. Eller, "using larger doses on the average than those that have for a long time been recommended. The recommended doses for the moderateto-severe forms of the disease range from 20,000 to 80,000 units, but in the majority of cases we felt reluctant to give doses of 20,000 units. We averaged around 80,-000." But as much as 120,000 units was stipulated for extremely severe cases, such as those evincing "bullneck." The anti-toxin was infused intravenously in 100 to 200 ml. of isotonic saline for 30 minutes.

Dr. Eller was also troubled by the fact

never been identified. "I want so whether the component we wanted to potest the patient was even present in the commercially available material. It is doubt did contain the protective factor. but in modern-day medicine I would like to see a more purified antitoxia."

Antitoxin Sonsitivity Tested

Before the antitoxin was administent sensitivity testing was carried out inthdermally with 0.1 ml. of a 1:100 dilution of the antitoxin in isotonic saline, Patient with positive test results were desensitive

Antimicrobial therapy was given for seven days to all patients. Those who had difficulty swallowing at first received elber intransuscular injections of procaine pencillin Ci every 12 hours (300,000 units 0 patients under five years and 600,000 units to those over five) or erythromycin lace biomate intravenously every 8 hours (12 mg/Kg. for children and 0.5 U adults) or exythromycin ethyl succialt intramuscularly every eight hours (only 6 Treating myocarditis resulting from

children two to five years, 12 mg/kg). After a while, the intravenously administered crythromycin was discontinued be Cause a high incidence of thrombophichilis was associated with it in all age groups and a high proportion of nausea and vomiting

in the younger age groups.

When able to swallow, patients received either penicillin G orally every six boun (125 mg, for those younger than five and 250 mg. for those older than five) of erythromycin steurate orally every sk hours (125 mg. for children under five and 250 mg, for those older than five).

"We decided as a group," 5498 Dr. McCloskey, "to keep patients hospitalis and on strict bed rest for at least 14 diff. Continued on following past Wednesday, November 22, 1972

Continued from preceding page because that would be beyond the danger point of myocarditis for most of them." Dr. Stanley E. Crawford, chairman of pediatrics, was prominent in the clinical

decision-making group. Electrocardiograms were taken every other day. House staff were required to sketch the patient's membrane as they went along on mimeographed illustrations of the pharyngeal area, "The location of the membrane is grossly a reflection of how well the patient is doing," Dr. McCloskey points out. "If it is extensive, it's undoubtedly in the respiratory tract and you had better be prepared to deal with obstructive disease."

Airway Obstructed in Four

Airway obstruction occurred in four patients, pneumonia in two, palatal paralysis in two, peritonsillar abscess in one, and myocarditis in 16. Three patients died, all children, in the period June, 1969-December, 1970. "They were definitely more ill from the very beginning than the rest of the children," Dr. McCloskey relates. Two died from obstructive membrane formation with pneumonia, and one of myocarditis. The three had all been in the pediatrics intensive care unit. (The family of one child who died refused to be immunized. MEDICAL TRIBUNE was told by several sources.)

"We were fortunate," says Dr. Mc-Closkey, "that we didn't see a lot of complications and deaths. Death rates as high as 7 to 10 per cent have been reported. That would have meant that we would have had 14 to 20 pcople die. I like to think that the low complication and fatality rates of this epidemic were because the patients were hospitalized promptly and treated promptly and correctly-but it may have been a characteristic of this particu-

Only 13.9 per cent of the San Antonio cases in 1970 were classified as severe. But 65.7 per cent did have the moderate form of the disease. Interestingly, 71.4 per cent of 49 patients who were fully immunized had the moderate form. However, only 6.1 per cent of the fully immunized had the severe form. Of all the 201 San Antonio diphtheria inpatients in 1970, 24.4 per cent had been fully im-

No Extremity Paralysis

There was not even one case of paralysis of the extremities. Cranial nerve palsies, though, yes. In fact, Dr. McCloskey relates: "Something very interesting occurred that we were not able to explain scientifically. It was an impression of emergency-room physicians that they saw an unusually high number of patients with isolated cranial nerve palsies who came in complaining of this and that. Maybe these people had gone unrecognized and untreated."

How does the toxin of Corynebacterium diphtheriae exert its effects?

"By interfering with nucleic acid metabolism," Dr. McCloskey explained. "Basically, it interferes with one of the enzymes that is very important in converting the DNA code into protein, amino acyl transferase II. When the toxin gets into a cell, the cell just dies. The heart may balloon cally are the heart and nervous system."

diphtheria is a big problem. "The conventional way to treat heart-failure, with a digitalis preparation, doesn't work too well because the myocardium is intoxicated," Dr. McCloskey points out. "So you have to try to help the heart do its job in every way you can: prevent accumulation of fluid, give oxygen, in severe instances give corticosteroids. If the patient develops signs of congestive heart-failure, reduce sodium intake, reduce fluid intake. One patient who died had entirely uncontrollable arrhythmia. We put in a pacemaker. We tried. But if your myocardium is totally sick, you can put in any number of pacemakers-it doesn't make any dif-

Among the several cardiologists who

supervised the care of the myocarditis patients were Drs. J. B. Norton, Jr., and Robert C. Talley.

"The thoracic surgeons also participated in the treatment of diphtheria patients because several of the children had so much membrane down their tracheobronchial tree that they had to be bronchoscoped for the secretions to be removed. They couldn't breathe, became cyanotic." Dr. Leo Cuello Mainardi, no longer at the medical school, led this effort. Several tracheostomies were necessary.

"Sometimes we removed the membrane ourselves-with swabs. Once I removed one that was hanging off a tonsil-with a Kelly hemostat. I was afraid of aspiration." Dr. McCloskey points out that the membrane was not removed routinely.

He wants to know: "Why do people call it a pseudomembrane? It's a membrane. It's a thin film composed of layers of dead and dying cells from the mucosa -proteinaceous material and bacteria. As far as I'm concerned, that's a membrane."

Occasionally, the membrane gets to be "quite thick, like shoe leather."

Diphtheria can also manifest itself as a skin wound. Wounds of the ankle, foot, and finger were diagnosed in four San Antonio diphtheria inpatients until now. Dr. McCloskey agrees with Dr. Mark A. Belsey of New Orleans that, although predominantly spread by respiratory secretions and droplets, diphtheria can be acquired from the skin. "While only four patients had diseased skin, we don't know how many people were skin carriers. There are people who carry the organism on the surface of the skin without a

However, isolation was basically of the respiratory type. Detailed in the infections control manual prepared by the hospital's nurse-epidemiologist, Charlene S. Hardy, R.N., it essentially consisted of handwashing on entry (and departure) and donning a gown and mask.

Medical isolation unit nurse Christine Jones, R.N., had never seen a case of diphtheria in her many years of nursing. In the epidemic, she had also to contend

MUDICAL TRIBUNE



The dual objectives of a new streptococcus detection program in Sterling, Colo., are to reduce the incidence of strep infections and to test the program's sampling methods. At left, volunteers take cultures at the Campbell School, one of 17 grade schools participating, and at right, microbiologist Pat W. Freeburg (foreground), lab director for the Northeast Colorado Health Department, organizes samples from the school. The program is supported by the Colorado-Wyoming Regional Medical Program and the Colorado Heart Association. Collicetor is Dr. Hum Jackson.

with polio, TB, salmonellosis, pneumonia,

"We didn't know where to put all the patients," says Dr. McCloskey. Many overspilled the six-room unit, which at the epidemic's height became at least a 12-bed

Disinfectant Believed Effective

Mary Prokopchack, R.N., head nurse on the unit, believes the disinfectant they use for handwashing, a long-chain iodinecontaining alcohol, is "very effective." Terminal disinfection, so important in diphtheria, was accomplished with a phenolic compound,

Pediatrics set up its special diphtheria ward in an entire wing of the pediatrics floor, a wing chosen because it is the only one without an immediately accessible fire exit. (There is one in the adjacent intensive

care unit.) "We moved the whole nurses' station in the wing," head nurse Ora Prattes told Medical Tribune. Sometimes six children with diphtheria were placed in one room. Not placing a newly admitted child with a convalescing one required a lot of maneuvering. And keeping the children entertained-and in bed-during convalescence proved tremendously difficult. "Once we left the room for a minute, and when we came back one of the boys with myocarditis was up on the window ledge writing on the window with a wet bar of soap. All the kids in the room were having a blast."

Laboratory diagnosis of the disease, the prevention of serum sickness, and clinical glomerulone phritis research—of a kind inftiated only because of the existence of the epidemic-will be discussed in the next in-

Caveats Issued on Resuscitation in Trauma

Medical Tribune Report

PHILADELPHIA—Every physician knows that care of the critically injured patient starts with resuscitation, but this rule is broken "disturbingly often," a leading surgeon declared here.

What is more, said Dr. Domlnic A. De-Laurentis, even when the rule is remembered, precious time it wasted during emergencies on inappropriate procedures like tracheostomy, when a simple endotracheal tube would do the job "quicker, safer, and better."

He issued his caveats at an international symposium on Critical Care Medicine sponsored by Hahnemann Medical Col- cardiac massage. "These two maneuvers ege and Hospital.

Speaking on the management of abdominal trauma, Dr. DeLaurentis declared: "Absolutely no definitive organ treatment should begin until it has been and should rarely be done for resuscitaestablished that the patient is resuscitated and is going to live. Successful resuscitation requires simultaneous, rapid, and up, the liver may become fatty, et cetera. methodical evaluation of three questions: g? Does the patient require immediate surgery to bring about cardiovascular or pulmonary function?"
"It is disturbing," he added, "to dis-

cover how often this [set of guidelines] is broken." In a series of do's and don't's for emer-

gency care, Dr. DeLaurentis, who is associate Professor of Surgery, made these • If there's significant external bleeding.

forget about tourniquets, hemostats, or sutures initially. "The best and oldest hemostatic device known to man is direct pressure applied by fingers, hands, or pressure packs.

• To treat cardiac arrest "always use" closed cardiac massage. "It can be done in seconds, is a sterile procedure, it usually produces no pneumothorax ... and provides adequate intraventricular pressure." cardiac tamponade or penetrating heart wounds that have opened the chest.

• In shock, avoid putting the patient in the Trendelenburg position, since this decreases pulmonary function and thus enhances anoxia.

• Don't give digitalis or antiarrhythmic drugs unless a competent cardiologist orders them. Use oxygen and administer sodium bicarbonate, 40 mEq. intrave-nously every three to five minutes during cardiac massage,

• Remember that adequate ventilation must be instituted simultaneously with constitute resuscitation. Either procedure

alone will fail to keep the patient alive." "Forget tracheostomy. This procedure should not be an emergency procedure tion because it usually takes too long to perform. Also, a hasty tracheostomy can lead to serious complications."

• If there's massive hemorrhage, don't longed fluid and blood administration. Move him to the operating room and start immediate surgery.

Commenting on surgical experience with abdominal trauma in civilian life.

The exceptions to this rule are recurrent Dr. DeLaurentis noted that the prognosis is far graver with blunt trauma, which carries a mortality of 20 to 60 per cent, than with penetrating abdominal wounds. In the latter the prognosis is "usually good, and mortality rates vary between 2 and 10 per cent, depending on the predominance of stab or gunshot wounds,"

Among the reasons for these differences in outcome, the surgeon suggested, were the fact that blunt trauma usually occurs in older people and that injuries are often multiple and may affect extra-abdominal organ systems. Further, he noted, penetrating wounds can be diagnosed quite early and treatment quickly started, while surgery usually begins late in blunt trauma because of the difficulty of making a diagnosis and the effect on multiple organ

If the patient is a victim of blunt abdominal trauma, Dr. DeLaurentis stressed: "Repeated careful abdominal examination is mandatory, and this must be constantly related to the patient's vital It can have an effect on all organs or sys- Is the cardiovascular system intact? Is the try to get the patient out of shock by pro- signs. Shock is a very important clue. If other causes of shock can be tuled out, this is the best indication for surgery. If shock is not present, we can afford to postpone surgery and, if necessary, do more detailed diagnostic studies."

A.M.A. Committee Issues Guidelines **On Cosmetic-Induced Skin Disorders**

Medical Tribune Report

Chicago-The American Medical Association Committee on Cutaneous Health and Cosmetics has issued a set of guidelines for physicians to assist in diagnosis and treat. • Bring in all cosmetics used, both old ment when a cosmetic-induced skin problem is suspected. The guidelines are:

• Stop use of all cosmetics.

remove all hair preparations.

· Stop use of all creams, including cleansing, foundation, tissue, and cold creams.

 Wash the face with an unscented soap. Remove nail lacquer.

and new, for examination and testing.

 Obtain names and samples of cosmetics used in any beauty parlor visit.

• Shampoo the hair with a bland soap to • If lips were not affected, use of lipstick may be continued.



port and guidance for children who

undergo reconstructive urologic surgery

to provide the genitalia they lacked at

birth, and for their parents, was stressed

by a four-man team from Columbia Uni-

versity's College of Physicians and Sur-

"It is not enough to build a new person

surgically (especially if the genitalia are

involved); you must support, counsel, and

reassure the inner man as well," they said.

The team-consisting of Todd Feinberg

and Katherine Jeter and Drs. William

Langford and John K. Lattimer-called

particular attention to private worries

about sexual performance and urine exit

at a new location that patients should be

Status Asthmaticus

severe hypercapnia, intravenous infusion

of isoproterenol reduces the incidence of

respiratory failure requiring mechanical

ventilation, shortens the duration of severe

hypercapnia, produces few, if potentially

serious, complications, and deserves ex-

tensive clinical trial, according to Dr. John

His collaborators were Drs. David W.

Wood, Ivan Harwood, and Harold N.

Pulmonary Function Test

A 10-minute test of pulmonary func-

tion, using methacholine in aerosol to in-

duce bronchospasm in susceptible sub-

jects, has differentiated "habit" cough

from other causes of paroxysms of cough-

ing in children, Dr. Patricia A. Nell of

Seventeen children, ranging in age from

six to 14 years and with undifferentiated

cough, who were symptom-free for 24

hours and off all medication for 12, were

given deep inhalations of the aerosol for

two minutes, and five of them developed

Warm-Blanket Surgery

covered by two layers of cotton blanket

under children undergoing anesthesia with

halothane, nitrous oxide, and oxygen is an

effective method of conserving heat when

the patient's surface area is less than 0.5

sq. M., according to Drs. Nishan G. Goudsouzian, R. H. Morris, and J. F.

Ryan, of the Anesthesia Laboratories Of

Harvard Medical School at Massachusetts

"For practical purposes," they said, "a

child with a surface area of 0.5 sq. M.

weighs 10 kilos and is 12-14 months of

ver infants of this size were anestr tized and underwent surgery on the warm-

ing blanket, while six control infants were

The investigators report that the fall in

body temperature was significantly less for

the warmed patients after 60, 75, 105, and

They also compared groups of children

with a surface area of more than 0.5 sq.

M. Six children in this category under-

went anesthesia and surgery on the warm-

ing blanket, while six controls did not

have the blanket, but no significant differ-

ences in temperature fall in these larger

children was found at 60, 75, 90, 105, or

They concluded that, since there were

potential hazards in the use of the blanker,

they could not recommend its routine use

General Hospital.

not placed on the blanket.

120 minutes of anesthesia.

120 minutes of anesthesia.

for larger children.

The use of an electric warming blanket

significant bronchospasm, she said.

Green Bay, Wis., reported.

J. Downes, of Children's Hospital, Phila-

In children with status asthmaticus and

geons and Babies Hospital.

helped to reveal.

Sheinkopf.

Sun Ssu-miao



chemist and physician during the Tang Dynasty of China (618-907). He was a famous physician who prepared his own medications for patients and was a prolific author. He wrote the book of the Thousand Precious Prescriptions and is believed to have written the Yin-hal ching wel, or The Delicacies of the Eye.

This stamp was issued 10 years ago by the People's Republic of China in a series honoring scientists of ancient

Text: Dr. Joseph Kler Stamp: Minkus Publications, Inc., New York

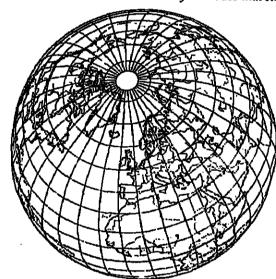
A CURRENT REVIEW OF INVESTIGATIONS IN GASTROENTEROLOGY

O is for ulcer: "myth" or fact?

As recently as 1967, one highly respected investigator1 branded as a "myth" the belief that persons with blood group O are more susceptible to duodenal ulcer than those with other blood groups. In an earlier paper,2 he expressed the opinion that studies undertaken decades before conclusively discredited any link between blood groups and disease; he also cites statistical and technical pitfalls inherent in any investigation of the link. But other researchers do not share his opinion.

Documented in many countries

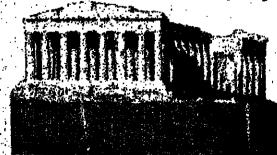
An exponent3 of the group believing that there is truth in the "O for ulcer" theory concedes that early



studies were flawed either by inefficient analysis or insufficient numbers of patients. He states, however, that starting in 1953 in England, very careful investigations were initiated to try to correlate certain conditions with specific blood types. One such study revealed a marked association between peptic ulcer and blood group O. Similar projects were soon undertaken in other parts of the world. Thus, today we can read in the 1971 edition of an authoritative medical textbooks that, while the reasons are unknown, the apparent greater susceptibility of persons with O-type blood to peptic ulceration has been noted in many countries throughout the world.

Greece — mythology and pathology

Curiously, Greece-the country that gave the world one of the most pervasive of all mythologies-



is also one of the countries that recently contributed impressive evidence to help bring the "myth" of group O susceptibility to duodenal ulcer closer to fact. A recent study⁵ consisted of a review of the records of '49,375 patients treated between 1950 and 1960 by the various departments of Evangelismos Hospital, Athens, Of these, 3858 were found to have had peptie ulcer disease. Only the ulcer patients whose blood groups had been determined were included in the study: 2197 patients-1790 men and 407 women ranging from 17 to 81 years of age. The ratio of gastrie to duodenal ulcer was about 1:5. One of the author's conclusions was that Greeks with group O blood stand a 20% higher chance of developing uleer disease than those with group A blood.

Another factor: excessive anxiety

Renewed interest in the correlation of blood types and ulcer diseases dates only from the early 1950's. The role of anxiety in duodenal ulcer, however, has long been noted. For example, it has been observed⁶ that the situations that may precipitate an ulcer are not as important as the individual's reaction to these situations.

References: 1. Wiener, A. S.; Med, Opinion Rev., 3:(10)148, 1967. 2. Wiener, A. S.; Lancet, 1:813, 1962. 3. Clarke, C. A.; "Blood Groups and Disease," in Steinberg, A. G. (ed.): Progresy in Medical Genetics, New York, Grune & Stratton, 1961, vol. 1, pp. 81-87, 4, Kirsner, J. B.: "Acid-Peptic Dis-Part, vol. t. pp. 81-87, 4. KISHET, J. B.: "Actu-Peptic Dis-case," in Beeson, P. B., and McDermott, W. (eds.): Creil-Loch Textholo of Medicine, ed. 13, Philadelphia, W. B. Saunders Company, 1971, vol. 2, p. 1266, 5, Merikas, G.: Christako-poulos, P., and Petroupoulos, E.: Amer, J. Dig. Dis., 11:790, 1966, 6, Palmer, E. D.: Clinical Gastroenterology, New York, Paul B. Hoeber, Inc., 1957, pp. 190-191.

Dual-action Librax for the undue psychic tension, and for the G.I. hypermotility and hypertension

Whatever the events that may cause the undue psychic tension that may trigger the ulcer-and whatever the blood group involved—the psyche may require as much attention as the soma. This is where the dual therapeutic approach of Librax can help. Only Librax combines in a single capsule the wellknown antianxiety action of Librium? (chlordiazepoxide HCl) with the antisecretory/antispasmodic action of Quarzan® (clidinium Br).

Up to 8 capsules daily in divided doses

When Librax acts to help relieve excessive anxiety that often exacerbates physical symptoms, it also helps reduce G.I. hypermotility and hypersecretionthereby helping to relieve associated spasm and pain. For optimum response, the dosage of Librax should be adjusted according to your patient's requirements ... 1 or 2 capsules before meals and at bedtime.

Before prescribing, please consult complete products nation, a summary of which follows:

Indications: Symptomatic relief of hypersecreto hypermotility and anxiety and tension states associated a organic or functional gastrointestinal disorders; and as & junctive therapy in the management of peptic ulcer, paultis, duodenitis, irritable bowel syndrome, spastic coliti, an mild alcerative colitis.

Contraindications: Patients with glaucoma; prosar hypertrophy and benign bladder neck obstruction; know hypersensitivity to chlordiazepoxide hydrochloride andig elidinium bromide.

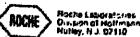
Warnings: Caution patients about possible combine effects with alcohol and other CNS depressants. As with a CNS-acting drups, caution patients against hazardous our pations requiring complete mental alertness (e.g., opening machinery, driving). Though physical and psychological & pendence have rately been reported on recommended dose use caution in administering I ibrium (chlordiazepoxide) drochloride) to known addiction-prone individuals or the who might increase dosage; withdrawal symptoms finder ing convulsions), following discontinuation of the drug my similar to those seen with bachiturates, have been reported Use of any drug in pregnancy, factation, or in women of childbearing are requires that its potential benefits weighed against its possible hazards. As with all anish linergic drugs, an inhibiting effect on factation may occur

Precautions: In elderly and debuttated, limit dough smallest effective amount to preclude development of ania, oversedation or confusion (not more than two capaking day initially; increase madually as needed and tolerald) Though generally not recommended, it combination is apy with other psychotropies seems indicated, carefully to sider individual pharmacologic effects, particularly in used potentiating drugs such as MAO inhibitors and plenothic zines. Observe usual precaptions in presence of impiel renal or hepatic function. Paradoxical reactionsing, our ment, stimulation and acute rager have been reported? psychiatric patients. Umploy usual precautions in treats of anxiety states with evidence of impending deptesmedal tendencies may be present and protective messa necessary. Variable effects on blood congulation baselot reported very rarely in patients reserving the drug and of anticoagulants; cansul relationship has not been establed

Adverse Reactions: No sale effects of manketality not seen with either compound above have been reported with Librar. When chlordiaerpoxide hydrochloride is od alone, drawspiers, ataxia and confusion may wear, 62 cially in the elderly and debilitated. These are resemble most instances by proper durage adjustment, but we six Occasionally observed at the lower dosage ranges in a foinstances syncope has been reported. Also oncountered at isolated instances of skin craptions, edenia, minor me-Struct irregularities, papiers and constitution, extrapyramid symptoms, increased and decreased libido - all infrequent and generally controlled with donne reduction; changes in EFG patterns thow-voltage fast activity) may appear don't and after treatment; blood dy a rasias timelading agranulor tosis), jaundice and hepatic dysfunction have been reponts occasionally with chlordiareposide hydrochloride, making periodic blood counts and liver function tests advisable duing protracted therapy. Adverse effects reported with Libit are typical of anticholmergic agents, i.e., drynes of moult blurring of vision, urinary hesitancy and constipation. Costipution has occurred most often when Librar therapy ! combined with other spannolytics and/or low residue ditte

for the anxietyrelated symptoms of duodenal ulcer **adjunctive**

and 2.5 mg clidinium Br.



Isolation of Enzyme May Aid In Therapy for Parkinsonism

Medical Tribune Report

ROCKVILLE, MD.-Isolation by Yale Uni-The following reports are from papers versity scientists of an enzyme essential to presented at the meeting of the American the brain's control of bodily movement Academy of Pediatrics, held in New York. appears to have significant implications for the treatment of Parkinson's disease, **Urologic Surgery** the National Institute of Mental Health The need for massive psychologic sup-

Paul Greengard, Ph.D., Gary Petzold, Ph.D., and John Kebabian, Ph.D., conducted the research under grants from NIMH and the National Institute of Neuological Diseases and Stroke.

In recent years, NIMH observed, medical scientists have produced evidence that the caudate nucleus plays a major role in directing movement of the body. In turn, dopamine is believed to regulate the activity of the caudate nucleus by interacting with a previously unknown chemical substance, the "dopamine receptor." Abnormalities of the dopamine system in the caudate nucleus are believed to be a major factor in Parkinson's disease.

Dr. Greengard's team has isolated from the caudate nucleus of experimental ani- Parkinson's disease, limiting the freedom

donamine receptor, NIMH said. Its name, "dopamine-sensitive adenylate cyclase," describes the chemical change it produces. Activity of this enzyme is stimulated by extremely low concentrations of dopa-

Apart from increasing basic understanding of how the brain works, clinical implications of the Yale team's findings are far-reaching, NIMH said. The search for new drugs useful in the treatment of Purkinson's disease has been hampered by lack of a suitable test system. Isolation of the dopamine receptor makes it possible to carry out rapid testing of large numbers of compounds for dopamine-like activity and should accelerate the discovery of new compounds for treatment of the

A secondary yield of the research, NIMH continued may lie in the treatment of mental illness. Such tranquilizers as the phenothiazines and butyrophenones possess as a major side effect the property of causing symptoms similar to those seen in mals an enzyme that appears to be the of physicians to use these drugs.

ısion

WHEREVER IT

Fractures

Wherever it hurts, **Empirin Compound with** Codeine usually provides the relief needed.



In general, only pain so severe that it requires morphine is beyond the scope of Empirin Compound with Codeine.

prescribing convenience: up to 5 reflils in 6 months, at your discretion (unless restricted by state law); by telephone order in many states.

Empirin Compound with Codeine No. 3, codeine phosphate* 32.4 mg. (gr. 1/2); No. 4, codeine phosphate* 64.8 mg. (gr. 1). Warning may be habit-forming. Each tablet also contains: aspirin gr. 31/2, phenacetin gr. 21/2, caffeine gr. 1/2.

Burroughs Wellcome Co. Research Triangle Park North Carolina 27709

sarrags. Witelever averse reactivities are indead ate or severe, reduce dosage or withdraw therapy ser-Ap-Es
Reserpiner increased salivation, increased gasiric secretions, nausea, vomiting, anorexia, eggravation of peptic vicer or vicerative colities, increased intestinal molitility, diarrhas, anginalike syndrome, actiquic cardiac rhythms per-licularly when used concurrently with digitalis, bradycardia, flushing, and mental depression, drowsiness, lassitude, nervousness, paradoxical anxiety, nightmares (which may be an early sign of mental depression), rarely atypical Parkinsonian syndrome, central nervous system sensitization (manifested by dult sensorium, deafness, glaucoma, uvalits, and optic atrophy), pruritus, skin rash, dryness of mouth, dizziness, headache, syncope, epistaxis, purpura due to thrombocytopenia, astima in susceptibility for or decreased libido, enhanced susceptibility to colda, dysuria, confunctival injection, dyspnes, muscular sches.

Hydralszinei Common: Headache, paipitations, angina pectoris.

Less frequent: Nasal congestion, flushing, lacri-

Before starting therapy, consult complete product literature.

COMPOUND

#4, codeine phosphate* (64.8 mg.) gr. 1

Esimil^a Ser-Ap-Es[®]

Esimil Hypertension (other than Jabile forms) which cannot be adequately controlled with simpler agents; moderale to severe hypertension; sustained hypertension; almost all forms of fixed and progressive hypertensive disease; when side effects of other antihypertensives prevent effective treatment.

Ser-Ap-Es All cases of hypertension except the mildest and the most severe. CONTRAINDICATIONS

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Guenethic
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occur freistudies were flawed either by inefficient analysis or
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Concurrer revealed a marked association between peptic ulcer cause extractions with specific blood types. One such study cause extraveled a marked association between peptic ulcer cardia, at and blood group O. Similar projects were soon undersurgery taken in other parts of the world. Thus, today we can anesthes read in the 1971 edition of an authoritative medical administ textbook that, while the reasons are unknown, the attentions. satisfies apparent greater susceptibility of persons with O-type because liblood to peptic ulceration has been noted in many restrict in countries throughout the world.

brench: Greece — mythology
religion of the control of the control

and the state of the country that gave the

containing formulations should be used only when dietary Bupplementation is not practical and discontinued immediately if abdominal pain, distention, hauses, vorniting or Gillebleding occurs.

Lowering of blood pressure in hypertensive patients may sometimes result in nitrogen retention, and also résult in reduced renal blood flow, particularly in those with impaired renal function. If progressive renal insufficiency is observed, discontinuance of drug may be designable. In patients with renal disease, this laides may precipitate azotemia. Cumulative effects may develop in those with impaired renal function. Observed, discontinuance of drug may be designable. In patients with eavers hepatic insufficiency. In patients with severe hepatic insufficiency, in patients with eavers hepatic insufficiency, in patients with cyrrhosis and ascites, watch for symptoms of impending hepatic come (confusion, drowsiness, tremor) and test for increased arterial ammonia concentration, sodium and pobassium excretion. This idea may decrease glucose tolerance; use cautiously in diabetics. Hyperuricania may occur but it is generally reversed by a uricosuric agent.

This idea may decrease arterial responsiveness to norepine phrine and increase responsiveness to norepine phrine and increase responsiveness to incorpine phrine and increase responsiveness to tubocurarine; if possible, withdraw, therapy 2 weeks prior to surgary. Hypotensiva episodes under anesthesia have been observed, if emergency surgery is indicated, preanesthetic and

considered in patients with a history of allergy or bronchial asthma.

Ser-Ap-Es

Reserpine: Withdraw reserpine 2 weeks before surgery, it possible. For emergency surgical procedures, give vagal blocking agents parentarily to prevent or reverse hypotension and/or bradycardie.

Electroshock therapy should not be given to patients receiving rauwoifia preparations, since severe and even fatal reactions have been reported. Discontinue for 2 weeks before giving electroshock therapy.

Hydralazine: Hydralazine, particularly if given for prolonged periods, may produce an arinfiliative syndrome, leading in rare instances to a clinical picture simulating acute systemic lupus envinermatouss. Most of these reactions are reversible upon withdrawal of therapy. These side effects are not anticipaled even with maximal recommended dosage of Ser-Ap-Es.

anesthelic agents should be administered in reduced dosage. The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma.

Company poulos, P 1966. 6, York, Pa

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Only Li known epoxide

Usage in Pregnancy
Esimii
Guanethidine: The safety of guanethidine for
use in pregnancy has not been established;
therefore, this drug should be used in pregnant
patients only when, in the judgment of the
physician, its use is deemed essential to the
welfare of the patient.

History blanding at the used

wellare of the patient.

Hydroxhiersthiazide: Thiazides should be used with caution in pregnant or laciating patients since this drug crosses the placental barrier and appears in breast milk and may result in fatal hyperbilirubinems, intrombocytopenis, or altered carbohydrate metabolism. It is therefore possible that the adverse reactions seen in the adult may occur in the newborn.

Ser-Ap-Es
Reserpine: The safety of rauwoilla preparations for use in pregnancy or laciation has not been established; they after the drug should be used in pregnant patients only when, in the judgment of the physician, its use is deemed essential to the welfare of the patient.

Hydrachlorothiszide: See hydrochlorothiszide section above. Usage in Pregnency

Hydralazine: Atthough there has been no adverse experience with hydralazine in pregnancy, there have been no aystematic animal reproduction studies to support the idea of safety in pregnancy. The drug should be used in pregnancy only when, in this judgment of the physician, it is deemed essential to the walfare of the patient. Hydrochlorothiazide section above.

PRECAUTIONS

PRECAUTIONS

PRECAUTIONS

Esimil

Guanethidine: Give cautiously to patients with
severe coronary insufficiency, recent myocardial
infarction, or carebrovascular insufficiency, Give
Esimil with extrame caution to lines with severe
cardiac failure.
Appetite suppressants (eg., amphetamines), mild
stimulants (eg., sphedrine, methylphenidate),
and (ricycle shidepressants (eg., impremine,
protriptyline, doxepin) may decrease the hypotensive effect of guenethidine. Walt one week
after disconlinuing MAO inhibitors before startlog guenethidine.

Even if blood pressure and other parameters are similar, different patients can have very different needs.

So CIBA provides two different approaches for patients who need more than a sedative or diuretic—less than the most potent antihypertensive therapy.

Ser-Ap-Es or Esimil® guanethidine monosulfate 10 mg

hydralazine hydrochloride 25 mg hydrochlorothiazide 15 mg

the most widely prescribed thiazide-containing antihypertensive combination

 because it provides hydralazine. Only Ser-Ap-Es adds Apresoline (hydralazine) to rauwolfia-thiazide. Dosage of each component is lower than if prescribed alone.

☐ because hydralazine maintains or increases renal blood flow through peripheral vasodilation.

□ because hydralazine relaxes cerebrovascular tone.

□ because reserpine has a beneficial calming action.

 because less rigid dietary salt restriction is often possible due to the saluretic action of hydrochlorothiazide.

hydrochlorothiazide 25 mg an equally valuable alternative

 because it provides guanethidineperhaps the most effective antihypertensive ever available - tempered with hydrochlorothiazide for smooth control of blood pressure.

□ because it often controls hypertension where other therapy fails. And when Esimil controls blood pressure, it usually stays controlled.

 because it contains no rauwolfiaan important consideration when there is a history of depression.

□ because it contains 25 mg. hydrochlorothiazide per tabletfor patients who can benefit from additional thiazide medication.

□ because dosage is simple. Once-a-day dosage is usually enough.

Ser-Ap-Es or Esimil Because there's more to hypertension than you can get off the cuff"

Peptic ulcers or other chronic disorders may be aggravated by a relative increase in parasympa-inatic tons. Periodic blood counts and liver function tests are advised during prolonged

therapy, esta are advised during prolonged therapy. Hydrochlorethiazida: Perform serum potassium, BUN, uric acid, and blood sugar tests prior to and at appropriate intervals during therapy. Watch patients for clinical signs of fluid or electrolyte imbalance (hyponatremia, hypochloremic alkalosis, hypokalemia). Warning aigns: dryness of mouth, thirst, weekness, lethargy, drowsineas, restlessness, muscle pains or cramps, muscular fatigue, hypolension, oliguris, tachycardis, 61 disturbance. Serum and urine electrolyte determinations are parlicularly important when patient is vomiting excessively; receiving parenteral fluids, steroids, or ACTH; during orisk duresis; in presence of severe cirrhosis.

interference with adequate oral intake of elec-interference with adequate oral intake of elec-trolytes will also contribute to hypokalemia. Digitalia may exaggerate metabolic effects of hypokalemia especially with reference to myo-cardial activity. (Signs of digitalia intoxication may be produced by formerly tolerated doses of

digitalia.) Hypokalemia may be avoided or treated with supplemental potassium or potassium-rich foods. Supplemental potassium is indicated when serum potassium is 4 mEq/liter or less, or if patient is receiving digitalis. Chloride deficit may be corrected with ammonium chloride (except in those with hepatic or renal disease) and targely prevented by a nonrigid salt intake. If dielary salt is unduly restricted, especially during hot weather, in severely edematous patients with congestive heart failure or renal disease, a low salt syndrome may complicate therapy with thiszides.

Translent elevations in plasma calcium may occur in patients taking thiszides, particularly in those with hyperparathyroidism, Pathological changes in the parathyroid gland have been reported in a few patients on prolonged thiszide therapy.

Hyperuricamia (or frank gout) may be precipitated in certain patients, insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetea may become manifest during thiszide therapy.

if nitrogen retention indicates onset of renal impairment, discontinue drug, Ser-Ap-Es impairment, discontinue drug.

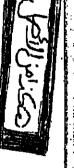
Ser-Ap-Es
Reserpine: Use cautiously in patients with history
of peptic ulcer, ulcerative colitis, or other Gi
disorders. May pracipitate billary coilo in
patients with gelistones.
Discontinue at first sign of mental depression,
teaping in mind possibility of suicide. Use with
extreme caution in those with history of mental
depression. Take special dare with astimatics
and in hyperiensives with renal insufficiency.
Use cautiously with digitalis, quinidine, and
guanathidine. Not recommended for adritic
insufficiency.
Mydralazine: Use cautiously in suspected coronary artery disease, cerebral vascular accidents,
and advanced renal damage.
Peripheral neuritis, evidenced by paresthesias,
numbness, and tingling has been observed,
Published evidence suggests an antipyridoxine
effect and addition of pyridoxine to the regimen if
symptoms develop.
Blood dyscrasias, consisting of reduction in
hemoglobin and red cell count, leukopenta,
agranulocytosis, and purpura, have been

eported rarely. If such abnormalities discontinue therapy.

Tablets (white, scored), each containing 10 mg guenethidine monosulfate and 25 mg hydrochlorothiazide; bottles of 100.

SerAp-Es
Tablets (dark salmon pink, dry-coated), each containing 0.1 mg reserpine, 25 mg hydralazina hydrochloride, and 15 mg hydrochloride, and 15 ong hydrochloride, and 15 ong hydrochlorothlezide; bollles of 100 and 1000. Consult complete literature of both products before prescribing.

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Drug Taking Found Common in Children World-Wide

dren and adolescents was one of the main preoccupations at the 30th International Congress on Alcoholism and Drug Dependence here.

tention to the persistent use of ampheta- are characterized by their indulgence in mines and the marked trend towards cannabis, the latter favor the stimulant experimentation with a variety of drugs.

"There is probably not a school in the whole of the United Kingdom in which drug experimentation does not take place," Dr. H. Dale Beckett, chairman of the British Association for Prevention of Addiction, told the gathering of about 1,200

Dr. Beckett, who is consultant psychiatrist at Cane Hill Hospital, Surrey, declared that there is now an acute need for are an aid to creative people; 62 per cent, a voluntary preventive program that would be more concerned with educating teachers, parents, and the general public to cope that it is safer to drive with someone high with the situation than with setting up expensive insitutions and specialized serv-

I. Hindmarch, Ph.D., Lecturer in Psycology at Leeds University, reported that a survey of attitudes toward drugs among 1,126 schoolchildren, which he recently

were taking drugs for other than medical reasons.

Comparing trends among university and British participants drew particular at- children, he said that whereas the former drugs. The use of amphetamines, by far the most popular drug in the survey, was particularly worrying, he commented, since they are drugs of dependence that cause an escalation of dosage in a rela-

Dr. Hindmurch's research on the youngdoctors, researchers, and social workers. sters' attitude towards drugs showed: 61 per cent thought that drugs are all right if taken occasionally; 58 per cent, that they that they are not so dangerous as the newspapers make out; and 44 per cent, on marijuana than drunk on alcohol.

Dr. Robert Kramer, Associate Professor of Pediatrics at the University of Connecticut, reported on an adolescence dependency pilot program started at the unitakers were studied. He concluded, he

completed, confirmed earlier findings that said, that there is true drug dependency AMSTERDAM-Drug taking among chil- 6 to 10 per cent of adolescents in Britain among adolescents; that they become as antisocial as their adult counterparts, resorting to stealing, dealing, and prostitution; that they tend to be of above average college students with those among school- intelligence; and that, finally, they are capable of change and are able to participate in rehabilitation programs.

At a press conference, Harold Aksne, a member of the executive center of the U.S. National Association for the Prevention of Addiction to Narcotics, reported an 80 per cent success rate with methadone. There is no doubt, he said, that methadone is a valuable aid in the gradual elimination of heroin and morphine cravings, but as it is itself an addictive drug, its use should be under strict medical supervision.

Dr. L. H. Bronson, of the Cleveland Center on Alcoholism and Drug Abuse said that "the prolonged use of low doses of methadone may be justified, as a means of keeping a person in treatment until social rehabilitation has been accomplished," but that high-dose methadone maintenance versity in 1970, in which 86 young drug has many disadvantages. One, he noted, is that the period required for withdrawal

and detoxification can be very lengthy.

Experience has shown, he said, that 60 to 65 per cent of patients benefit from the low-dose regimen of 10 to 30 mg, daily for from several weeks to a year.

Fears about the effects of methadoge on pregnant women were discounted by Drs. Cicorge Blinick and Robert Wallach of the Beth Israel Medical Center, New

They found that women treated with large doses of methadone showed regular menstruation, ovulation, conception, and pregnancy. One-third of their bable weighed less than 2,500 Gm. and we therefore, in weight terms, prematur, they reported, but no congenital about malities were found and so far there seem to be no impairment of physical and late lectual development.

Cannabis

Although experiments on rats by Dr. G. Chesher, of Sydney University, Australia, produced some evidence of the cumulative and tolerance effects of cannabis extracts, a highly complex and detailed study of cannabis smokers by the Alcoholism and Drug Addiction Research Foundation in Ontario suggested that the drug produces little, if any, damage to general physical health.

Among their chief results was evidence that cannabis does not produce dependency and that, although combinations of cannabis and alcohol in above-average quantities tend to impair work productivity, cannabis alone cloes not seem to do this to any great extent.

Phencyclidine

Among discussions on drugs less commonly used for nonmedical reasons came a warning from Dr. D. Lehman, of the Yeshiva University College of Medicine, that youngsters are now using phencyclidine, or PCP, in the belief that it is a cannabis extract.

The effects of PCP, he said, are unpredictable and lead to central nervous sytem depression, hallucinations, and # forms of abnormal behavior.

"It is important," he added, "that the medical profession be aware of this drug and its effects on young people in todays drug scene.

Prescribed Drugs

The use of drugs prescribed for medical reasons also came under some discussion. with a warning that psychiatrists are 100 casual in the extent to which they dolors large quantities of potentially addictive or dangerous drugs.

But a reassuring point was made by the National Institute of Mental Health, which denied that Americans are being "drastcally overmedicated." Although a surrey found that a sizable minority use medically prescribed over-the-counter psychotherapeutic drugs, few use them on artifilar and continuing basis.

There is "an unfortunate tendency to exaggerate the extent of hard-core abuse by considering only the number of people using drugs, while ignoring the manner in which the drugs were used," the report

Although the new drug scene in all it hues claimed most attention from outsiders, alcoholism remained a major interest in the congress program. The role of the vife in helping to treat the male alc and the need for her to be encouraged to seek professional help was emphasized b D. I. Meier, alcoholism counselor, of S

Dr. R. H. Wilkins, Lecturer in Genera Practice at Manchester University, Eng land, similarly concentrated on sociologi aspects in a paper that argued that the general practitioner who specifically asks questions about alcohol abuse among par tients with certain "at risk" factors would detect a considerable proportion of previ-

Ously undiagnosed disease.

Dr. M. T. Malcolm, of the Regions Addiction Unit in Moston Hospital, Ches. ter, England, found that implantation disulficam was useful in the treatment of chronic alcoholics who had lost the motivation for taking the drug in tablet form

Panel Asks Immediate End to Syphilis Study

of withholding treatment from the in-

Wednesday, November 22, 1972

fected subjects," the panel concluded. Yet, since the late 1940s, numerous medical authorities have recommended treatment for syphilis with penicillin in all stages of the disease, including late latent syphilis and tertiary syphilis, it emnhasized.

As recently as 1969, a technical and medical advisory panel convened by PHS "is reported to have recommended, with some ambiguity," that the surviving participants not be treated, the panel pointed

The panel asserted it had received no convincing evidence that participants were adequately informed about the nature of the research, either at its beginning or subsequently. It urged that PHS immediately inform survivors of the nature of the

Arrangements should be made "with all

Gantrisin® (sulfisoxazole) Roche®

provides your patients with many

high solubility at average urinary pH

economy (average cost of therapy:

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Nonobstructed urinary tract infec

tions (mainly cystitis, pyclitis, pyelonephritis) due to susceptible organisms. Important Note: In vitro sensitivity tosts not always reliable; must

be coordinated with bacteriological and clinical response. Add aminobenzole acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent uri-

nary infections. Maximum safe total sultenamide blood level, 20 mg/100 ml; measure levels as

Contraindications: Hypersensitivity to sulfon-

Warnings: Safety in prognancy not ustablished. Do not use for group A beta-hemolytic strepto-

coccal infections as sequelae (rheumatic fever

cytosis, aplastic anemia and other blood dys-crasias. Sore throat, fever, pallor, purpura or jaundice may be early indications of serious

blood disorders, CBC and urmalysis with caroful microscopic examination should be performed

Precautions: Use cautiously in patients with im

related, may occur in glucose-6-phosphate de hydrogenase-delicient patients. Maintain ad

equate fluid intake to prevent crystalluria and

Adverse Reactions: Blood dyscrasias: Agranulo

reactions: Erythema multiforme (Stevens-John-on syndrome), generalized skin eruptions, epi-

promius, exfoliative dermalitis, anaphylactoid re-ections, periorbital edema, conjunctival and

s: Nausea, emesis, abdominat pains, hepa

diarrhea, anorexia, pancreatitis and stoma

CN.S reactions Headache, peripheral icuritis, mental depression, convulsions, ataxia

toxic nephrosis with oliguria and anuria. Peri-arteritis nodosa and L.E. phenomenon have oc-Curred. Due to certain chemical similarities with

Zides) and oral hypoglycemic agents sulfon amides have caused rare instances of goiter pro-

administration. Cross-sensitivity with these

Supplied: Tablets containing 0.5 Gm suffisoxa-

ne goitrogens, diviretics facetazolamide, this-

ICLOB, diviresis and hypoglycemia as well as your manghancies in rats fellowing long term

paired renal or hepatic function, severe allergy or bronchial asthma. Hemolysis, frequently dose

high urinary levels

rapid absorption

· generally good tolerance

high plasma concentrations

less than 61/2¢ per tablet)

rapid renal clearance

speed" for the health assessment, treat- ists Group, the panel said that the group the study in a suitably adequate, easily accessible facility, the panel said.

Confidentiality Vital

Moreover, every effort should be made to preserve confidentiality with regard to the identification of participants, it continued. PHS epidemiologists should be mobilized to assist in locating all surviving participants as well as others who have been infected as a result of the withholding of treatment from them. Adequate provisions for maintaining the present standards of living of the participants during the evaluation and treatment periods should be undertaken.

At the minimum, any benefits that have been promised to the participants in the past should remain in effect, the panel ad-

Outlining the role of the Select Special-

ment, and care of all persons included in should be composed of "competent doctors and other appropriate persons, with experience in the problems arising from this study."

It should include, but not necessarily be limited to, a dermatologist with experience in syphilology, who will serve as chairman, two internists (at least one of whom shall be a cardiologist), a radiologist, a neurologist, an ophthalmologist, a psychiatrist, a doctor of dental surgery, and a social worker.

It should not include anyone who has had prior connection with the study. The Select Specialists Group will submit

report about its activities to the panel. Dr. DuVal said that the panel now will act on two other directives:

• To determine whether the study was justified in 1932 and should have been continued when penicillin became generally available.

• To determine whether existing policies to protect the rights of participants in health research conducted or supported by HEW are adequate and effective and to propose improvements, if needed.

Recommendations by Subcommittee

The panel is formally known as the Tuskegee Syphilis Study Ad Hoc Advisory Panel. The recommendations to end the study and provide all necessary medical care were offered by its Subcommittee on Medical Care, headed by Dr. Vernal G. Cave, director, bureau of venereal disease control, New York City Department of Health.

Other members of the subcommittee were Ronald H. Brown, general counsel, National Urban League; Dr. Jean L. Harris, executive director, National Medical Association Foundation; Jeanne C. Sinkford, D.D.S., associate dean for graduate and postgraduate affairs, Howard University; Prof. Jay Katz, Yale Law School; and Fred Speaker, attorney, Harrisburg, Pa.



In acute, recurrent or chronic nonobstructed cystitis

BENEFITS OF GANTRISIN sulfisoxazole/Roche

High unnary drug levels

Gantriein quickly reaches peak antibacterial goncentrations
in the urine—usually in 2 to 3 hours, With the recommended
dosage regimen. Gantrish maintains these high unnary levels
throughout therapy to combat such susceptible organisms
as E. coli, Kiebsiella-Aerobacter, Staphylococcus aureus, Proteu
mirabilis and less irequently, Proteus vulgaris.

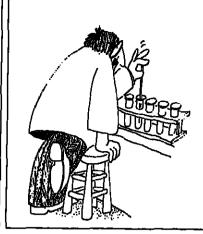
Generally good tolerance

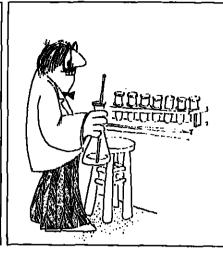
Because of Cantriain's high solubility and rapid excretion,
therapy is relatively free of adverse reactions serious enough to
require discontinuance of the drug (3:1% of 1002 patients in a
fedent sludy*). Even minor reactions are comparatively
intrequent, but may include natices, headache and vomiting;
For other possible undesirable reactions, and preceditors,
please see summary of prescribing information on opposite page.

For nonobstructed cystitis sulfisoxazole/Roche Usual adult dosage

200

Violgeme Hydrocortisorie logochiorhetionogulin and hydrocorti







cultisis of the skin; most viral skin lesions (including herpts simplex; vaccinia, and varicella)

Visage in Franciscoy
Authough topical sterples have not been reported to have rit
adverse effect on pregnancy, the selent of their use in pres
nant families has not been established. Therefore, they
should not be used extensively on pregnant patients in large
smouther of for prolonged periods of time.

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PRECAUTION 8

May consequent that its sensitized fain in here deset if this specification of the protonged of the p

WARNINGS
This product is not for aprilhelmic use.
In the presence of systemic injection in a systemic injection in the presence of systemic injection in the presence of systemic injection in the presence of the presence of

Wednesday, November 22, 1972

by Oldden

Most Soft-Tissue Sarcomas in Child Believed Curable by Current Methods

Continued from page 1

to. "In fact, the current management of these tumors may be summarized as radical surgery, radical radiation therapy, and radical chemotherapy."

"Dramatic improvements," Dr. Exelby said, have occurred during the past decade in the cure rate of embryonal rhabdomyosarcoma, "by far the commonest soft-part sarcoma seen in children." From 1960 to 1967, he reported, only 18 of 94 children with this lesion at Memorial Hospital were cured, a survival rate of 20 per cent. From 1968 to 1970, when chemotherapeutic agents were first used intensively in these patients, 13 out of 32, or 40 per cent, are alive more than two years. During the same period, he added, M. D. Anderson Hospital investigators in Houston, Tex., reported a 66 per cent survival rate, using surgery, radiation, and chomotherapy.

Even Greater Improvement

"Although it is still too early to predict, it seems that from 1970 on, when we began combining surgery with radiation therapy and intensive four-drug chemotherapy," Dr. Exelby declared, "our results have shown even greater improvement. Out of 12 primary treatable cases that came to Memorial between 1970-71, 11 children are living more than 12 months free of disease. This is a one-year-plus survival rate of 90 per cent. Of eight children with advanced or metastatic disease, four are surviving more than one year, or 50 per

The physician, who is chief of Memorial's pediatric surgical services, noted that head and neck lesions, because of their location, are rarely amenable to surgery but appear to respond "very favorably" to radiation therapy. "Elsewhere in the body, radical surgical extirpation is the treatment of choice for the primary lesion," Dr. Exelby observed. "I must emphasize that the surgery is still radical, but we are trying nerover possible to preserve extremities.

Current Experience Described

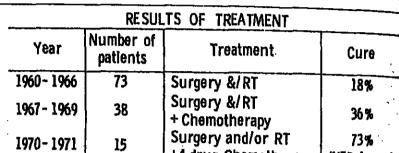
Describing current experience with fibrosarcoma, Dr. Exelby said that while the cure rate of 90 per cent is obviously satisfying, "there is a disturbingly high rate of amputation" in these children. Further, the cancer is extremely difficult to eradicate because of the tendency to local recurrence. In the Memorial Hospital series of 22 cases the average number of recurrences was three, and 30 per cent of the tumors recurred as often as five times.

Synovial sarcomas, Dr. Exelby said. are about as common as fibrosarcomas, occurring primarily as a tumor of young adults. Of 12 primary cases seen at the hospital, he continued, nine patients are living three to 30 years after freatment, free of disease. Only two of 13 patients who were admitted with metastatic disease are alive five years after treatment.

"We are undoubtedly making great progress in the management of soft-part sarcomas in children and are now in a position to say that we can cure many of these tumors, if diagnosed and treated early," Dr. Exelby concluded. 'It must be emphasized that any lump or abdominal

mass on a child must be excised and histological diagnosis made at the earliest possible opportunity. The improvement in our results is undoubtedly due to the combined aggressive treatment of these children by the surgeon, radiotherapist, and

RESUL	TS OF TREATMENT	
Number of patients	Treatment.	Cure
73	Surgery &/RT	18%
38	Surgery &/RT + Chemotherapy	36%
15	Surgery and/or RT +4 drug Chemotherapy	73% (NED 1yr +)
	Number of patients 73 38	patients 73 Surgery &/RT 38 Surgery &/RT + Chemotherapy Surgery and/or RT



Suggested for the Retarded pairment of their fitness. He continued: MONTREAL-Increased sports participation "Although their average levels of physifor retarded children was urged here at the cal fitness are deplorable, they can be im-

fifth International Congress on Mental Retardation by Frank J. Hayden, Ph.D., Professor of Physical Education at the University of Western Ontario, London, Ont.

The retarded have been denied athletic opportunities because it was assumed that they are incapable of being athletes, he said; yet their strength and endurance could be radically developed by physical

"About 2,500 competed in the third International Special Olympics in 1971 in Los Angeles," he related. "In 1972, 40,000 competed at state-level meets. This year, 300,000 retarded youngsters competed in local and area games in over 2,000 communities across the United States, Canada. and France. Every indication is that their lives are richer for the experience."

Many retarded, Dr. Hayden said, have

proved drastically and rapidly. The aver-

half with one hour per week of physical education over a seven-month period." Other congress participants in the sports punel were in agreement that all countries are underdeveloped when it comes to care for the retarded. Those mildly re-

ing for those below that level, The consensus was that such activities

age strength and endurance of trainable retarded youngsters can be increased by

tarded (I.Q. 67-52) are readily acceptable in normal sports programs, but almost everywhere, it was stated, a great need exists for facilities, services, and understand-

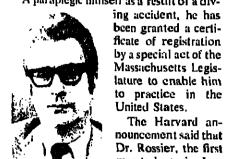
can have beneficial effects across a wide range of disability not only with respect to physical fitness, but also with respect to social relationships, personal development, improved self-image, motor ability, perbeen overprotected, with consequent im- ceptual motor skills, and self-confidence.

Swiss Paraplegia Expert To Join Harvard Faculty **Greater Sports Participation**

Medical Tribune Report
BOSTON-Dr. Alain B. Rossier, a Swiss specialist in the treatment of paraplegia and quadriplegia, will become Professor of Social Medicine and Spinal Cord Rehabilitation in the Faculty of Medicine at Harvard University next March, it was announced here.

A paraplegic himself as a result of a diving accident, he has been granted a certi-

The Harvard an-



man to be trained es-

pecially as a spinal traumatologist, is currently director of the spinal cord injury service of the University of Geneva, Switzerland, which he established in 1964 and has built into one of the world's outstanding paraplegic units and one of the few closely connected to a medical school.



The Mail

Is Holiday Magazine joining the por-

Dr. Sam A. Nixon of Floresville, Tex., has sent us a promotional letter from the magazine's executive editor that says: "With a fervor we edit out any un-American, un-immoral or un-happy thinking."

• That other Texas contributor, the Nit Picker, reports considerable puzzlement caused by the following sentence in I.A.M.A.:

"Then, under fluoroscopic control, a radiologist can introduce with caution a small amount of a nowdered solution of diatrizoate sodium (Hypaque sodium) to outline the leak." He asks for help in figuring out what a powdered solution is.

(For what it was worth, we wrote him that during World War II days it was unreliably rumored that the Army was working on dehydrated water; just add water to reconstitute. More useful assistance for the Nit Picker is solicited.)

We follow the pair of Texans with a pair of university public information

· Jack Oswald, of the University of Miami School of Medicine, sent us an advertisement from Public Relations Journal that said:

"In New York, corporate headquarters of Industrial America, the New York Times delivers more decision-level executives than any other publication."

(Obstetricians, please note.)

 Arthur Isbit, of Rutgers University, found the following ad in an unnamed

"Rich, testy man seeks smart, gutsy people. The people I'm going to hire wear their guts on their sleeve."

(Gastroenterologists, plastic surgeons, and highly skilled cleaners, please note.) We have still another pair, this one,

• Dr. Leonard Staff, Jr., of Tempe, Ariz., was taken by a title in an unnamed digest that ran: "Amputated Head and Neck Tissue," as well as a sentence in the piece that said, "This study was undertaken to help us try to establish criteria for replacement of accidentally amputated head and neck tissues."

Those careless guillotines!

• Dr. R. J. Bingham of Toledo, Ohio, found this in still another unnamed publication for, he says, family physicians: "Being prepared for severe reactions with resuscitative equipment and trained personnel serve the patient better than useless protesting."

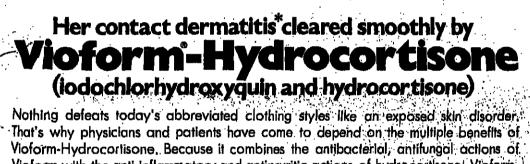
Turns out that it's a putdown not of Young Turks but of unnecessary pretest-

• The occasional oddity of the British and their laws is illustrated in a British Medical Journal piece on the Road Safety Act, sent to us by Dr. Austin M. Brues, of the Argonne National Laboratory

After discussing the fact that anyone who fails the breathalyser drunkenness test must provide a blood or urine specimen for laboratory testing, B.M.J. says:

"But the act does not require that the blood sample be taken from any particular part of the body. Shortly after it came into force a Hertfordshire lorry driver was aquitted by a jury of a charge of falling to provide a sample after he had said that a. sample could be taken from his penis but nowhere else. The police doctor had told the jury that to have a sample from such a site might well have led to a malpractice suit against blm."

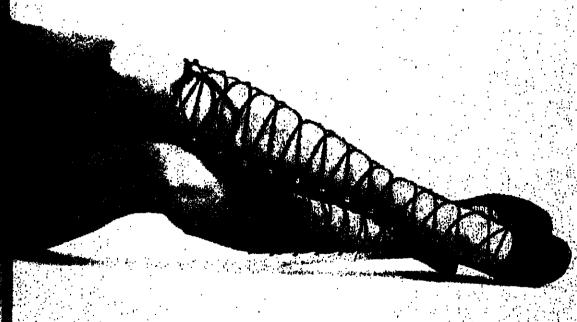
Readers are invited to contribute items of 100 words or less to this column. Contributions should be mailed to MEDICAL TRIBUNE. 880 Third Avenue, New York, N.Y., 10022.



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This drug has been evaluated as possibly effective fo this indication, See brief prescribing information.



in the disper or urine.
Prolonged use may result in overgrowth of nonsusceptible organisms requiring appropriate literary.

ADVERSE REACTIONS
Few reports include: Hypersensitivity, local burning, irritation, prufits. Discontinus if unloward reaction occurs. Rarely, topical corticosteroids may cause strias at sits of application when used for long periods in inteririginous areas. DOSAGE . Apply a linin layer to affected areas 3 or 4 times daily.

How attention affected areas 3 or 4 times daily.

How attention

A water-washable base containing steary alcohol, spermacett, petrolars and strong steary alcohol, spermacett, libes of 5 and 20 cm. Chimnent, 5% todochipmydroxyquin and 1% hydrocortisone in a petrolatum base; tupes of 5 and 20 cm. Chimnent, 5% todochipmydroxyquin and 1% hydrocortisone in a petrolatum base; tupes of 5 and 50 and 18 water washable base containing stearic acid, catyl alcohol, landin, aropytene stycol, sorbitan tripleate, polygonate 50, treatmounting, metry-paraben, propyteraben, and petrolatum Frora in water, plastip squeeze bottles of 15 ml.

Mild Cream, 3% lodochlorhydroxyguin and 0.5% hydrocorti-sons in a water-washable base containing stearyl alcohol, spermaceti, petrolatum, socium lauryl sulfale, and siycerin in water; tubes of ½ and 1 ounce. Mild Olntment; 3% iodo-chlorhydroxyguin and 0.5% hydrocortisone in a patrolatum.

Consult complete product illerature before prescribing.

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CIBA



an'ti·hy'per·te·nac'i·ty (ăn'tĭ·hī'pĕr·tē·năs'ĭ·tē),n. The ability of Esidrix (hydrochlorothiazide) to help control hypertension, especially mild hypertension, over a long period of time. This is associated with the gradual, sustained action desirable in long-term therapy. A characteristic also described as "staying power."

-Esidrix has it. (hydrochlorothiazide)

staying power for long-term therapy in mild hypertension

Esidrix® (hydrochlorothiazide)

Contraindications: Anuria; discontinue drug if renal shutdown occurs for any reason. Progressive hapatic disease may accelerate development of hapatic coma. Oo not give to patients with known altergy to thiszides or other sulfonamidedrived drugs.

Warnings: Small bowal steriosis, with or without ulcaration, has been associated with use of enterio-coated trilazides with polassium, and with enterio-coated polassium alone. These bowel lesions have caused obsiruction, hemorrhage, and perforation; surgery was frequently required and deaths have occurred. Available information tends to implicate enterio-coated polassium saits. Therefore, coated polassium-containing formulations should be used only when detary supptementation is not practical and discontinued immediately if abdominal pain, distention, nauses, vomiting, or Gi bleeding occurs.

occurs.
Lowering of blood pressure in hypertensive patients may sometimes result in hitrogen retention, and also result in reduced fensi blood flow, particularly in those with impaired renal function. If progressive renal insufficiency is observed, discontinuance of drug may be destrable. In patients with renal disease, thiszides may precipitate azotemia. Cumulative effects may develop in those with impaired renal function. Dosage should always be carefully titrated. tion. Dosage should always be carefully litrated. Pay special attention to electrolyte belance of patients with severe hepatic insufficiency, in patients with severe hepatic insufficiency, in patients with cirrhosis and ascies, watch for symploms of impending hepatic come (confusion, drowsiness, tremor) and test for increased arterial ammonia concentration, sodium and polassium excretion. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperunicemia may occur but is generally reversed by a uricosuric agent. Thiazides may decrease arterial responsiveness to norspinephrine and increase responsiveness to norspinephrine; if possible, withdraw therapy 2 weeks prior to surgery. Hypotensive episodes under anesthesia have been observed. If emergency surgery is indicated, preanesthetic and artesthetic agents should be administered in reduced coage. The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchief asthma.

thiazides.

Transient elevations in plasma calcium may occur in patients taking thiazides, parlicularly in those with hyperparathyroidism. Pathologicat changes in the parathyroid gland have been reported in a few patients on prologed thiazide therapy.

Grand School

reported in a terr passence of the repy.

Hyperuricemia (or frank gout) may be praciply taled in cartain patients. Insulin requirements it diabelic patients may be increased, decreased, or unchanged, Latent diabetes may become mainliest during integride therapy.

If nitroger retainton indicates onset of ranal impairmant, discontinue drug.

Usage in Pregnancy
Thiazides should be used with caution in pregnant or lactating patients since this drug crosses the placental barrier and appears in breast milk and may result in fetal hyperbilirubinemia, thrombocytopenia, or altered carbohydrate metabolism. It is therefore possible that the adverse reactions seen in the adult may occur in the newborn

Adverse Reactions:

Gastroinactinal

Gastroinactinal

Tandresia, gastrocted

tation, names, voicining,
crampling, digretines, comsilpation, jaunotice tintrahy,
glycosuria. Central hervous System—dissinces,
vertigo, paresthasias, headache, xaninopsia.

Dermatologic—Hypersensitivity—purpura, photosensitivity, rash, urticarin, necrolizing anguite,
Slevens-Johnson syndrome, and other hypersensitivity reactions. Hematologic—hypersensitivity reactions. Hematologic—hypersensitivity reactions. Among the protonsion
may occur and may be potentiated by account.

By an account complete tiderature of title for the protonsion.

Compared to proton account of the protonsion of the Precautions: Perform serum potasalum, BUN, uric acid, and blood siger tests prior to and at appropriate intervals during therapy. Waich appropriate intervals during therapy. Waich patients for clinical signs of fluid or electrolyte imbalance (hyponatremia, hypochloremic alkalosis, hypokalemia). Warning signs: dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotansion, oliguria, tachycardia, Gi disturbance. Serum and urine electrolyte determinations are particularly important when patient is vomiting excessivaly; receiving percenteral fluids, steroids, or ACH; during brisk diuresis; in presence of severe cirrhosis. interference with adequate oral intake of electrolyteswill also contribute to hypokalemia. Digitalis may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. (Signs of digitalis intoxication may be produced by formerly tolerated doses of digitalis.) Hypokalemia may be avoided or treated with supplemental potassium or potassium-rich foods, Supplemental potassium is indicated when serum potassium is 4 mEQ/liter or less, or if patient is receiving digitalis. Chipride destrict

Dosage: Tablots should be taken with an immediately after meals.

Edoma: Initial—50 to 100 mg once or twice daily for several days. Maintenance—25 to 100 mg daily or intermittently. Refractory patients may require up to 150 mg daily.

Hypertension; initial -- Usual date 75 mg rypertensions initial—Usual date 75 m. daily. Maintenance—After a week dosage may be adjusted downward to as little as 25 mg or upward to as much as 100 mg daily. In resistant patients, up to 150 mg daily may be required. Combined therapy—When necessary, other anti-hypertensives may be added graduelly and with caution because of the potential-ling effect of this drug. Dosages of gangtions blockers should be halved. serum polassium is 4 mEq/liter or less, or if patient is receiving digitalis. Chloride deficit may be corrected with ammonium chloride (except in those with hepatic or rehal disease) and largely prevented by a nonrigid salt intake. If detary sait is unduly restricted, especially during hot weather, in severely edemalous patients with congestive heart leiture or renal disease, a low salt syndrome may complicate therepy with Translant elevations is to the congestive for the congestive for the congestive heart leiture or renal disease, a low salt syndrome may complicate therepy with Translant elevations is the congestive of the congestiv

Supplied: Teblets, 50 mg (yellow, ecored) and 25 mg (pink, scored); bot-ties of 100, 1000 and 5000.

Consult commete the above petitie pre-

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Toronto Study On Vitamin C **Backs Pauling**

tions." Dr. Anderson's colleagues in the trial were D. B. W. Reid and G. H. Beaton.

Two outstanding, and "quite unexpected,"findings emerged from their study, which was reported in the Canadian Medical Association Journal.

 Of the 407 volunteers taking 1,000 mg. vitamin C daily, 26 per cent remained free of illness throughout the study, compared with only 18 per cent of the 411 subjects on placebo.

• Furthermore, those in the vitamin group had 30 per cent fewer days of total disability (confinement to the home or absence from work) than those in the pla-

The findings of substantially less disability in the vitamin group, the investigators said, "may have important theoretical and practical implications."

"Further studies," they added, "will of course be required to confirm this finding and establish its magnitude more precisely, but the high level of statistical significance associated with it encourages us to believe that it is likely to be a real effect rather than a statistical artifact."

Because of their initial skepticism of Dr. Pauling's claims, they said, they therefore sought to enroll

a large number of subjects to "avoid an result." Furthermore, the subjects were instructed to increase their intake to 4,000 mg./day at the onset of cold symptoms, in order to

Pauling's recommendations. Thus, they noted, they added "a therapeutic feature to an essentially prophylactic trial." In addition, as opposed

to previously reported short-term studies, they designed their trial to last for several

Only subjects who normally experience at least one cold in the January-March period (the period in which the trial was to be conducted) were admitted to the program. The two groups of subjects, vitamin and placebo, were found when the code was broken to be remarkably closely matched as to age, sex, occupation (student or other), smoking habits, number of colds normally, the frequence that they were in crowds, and ingestion of other vitamins and fruit juices.

Calendar-Type Record Kept

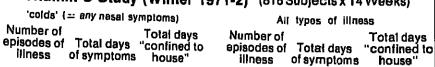
The subjects turned in a calendar-type record sheet each month indicating for each day whether they were sick or well, the number of tablets taken (the vitamins and placebo were identical in appearance and taste), and on days of illness the sites of symptoms (nose, throat, and chest), the ble, temperature.

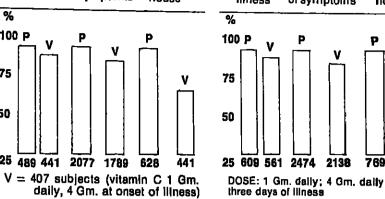
The 818 subjects who were the basis of the study were in the program for at least two months and presented complete personal and sickness records for analysis. For the vitamin group, the mean number of days in the study was 103.2; for the placebo subjects, it was 101.9.

It was found that the mean number of episodes of illness was 7 per cent lower and the mean duration of symptoms (days of symptoms per episode) 5 per cent less in the vitamin group than in the placebo group, but the investigators said the differ-

nces were not statistically significant.

Vitamin C Study (Winter 1971-2) (818 Subjects x 14 Weeks)





appeared markedly less frequent in the vitamin subjects than in the placebo group, it was found that local symptoms (referable to nose, throat, and chest) showed less striking differences. The reduction in disability in the vitamin group, the investigators said, appeared to be due to the lower incidence among them of constitu-

P - 411 subjects (on placebo)

tional symptoms. It is necessary, the investigators said, "to establish the most appropriate dosage levels, the relative importance of the prophylactic and therapeutic features, and the safety of prolonged ingestion of large doses of ascorbic acid or its salts."

These are questions that trials planned for this winter will seek to answer, Dr. Anderson told MEDICAL TRIBUNE.

They expect to study nine groups of 400 subjects each, he said. They will examine the effects of different dosages and different dosage schedules. The daily dose schedule will range from 250 mg. to 2 Gm. The dosages at onset of cold symptoms will range from 1 to 8 Gm.

The subjects will remain on their regimen for three months, Dr. Anderson said, and during the fourth month they will be off the regimen but will be questioned to

DOSE: 1 Gm. daily; 4 Gm. daily for first

"determine whether there is any rebound effect in those who were on high doses of vitamin C-that is, where they have pertion" involves? haps become dependent on the vitamin.

Pauling Gives Concept Of a Valid Trial

In an exclusive interview last January. Dr. Linus Pauling outlined to MEDICAL TRIBUNE his concept of a "scientifically valid trial" of his hypothesis.

"The best test [of the protective offect of vitamin C]," he said, "would be one that entails exposure to cold infection, using several hundred subjects and higher doses of ascorbic acid."

The Nobelist, who said that he was willing to have his hypothesis stand or fall by the results of such a trial, had criticized some eurlier studies because the vitamin C dose was too small and a potent viral challenge had been employed, instead of exposing patients to the natural disease.

He predicted that a study design based on his views would give statistically significant evidence that ascorbic acid may be protective against colds.

Pauling's Critics Advised To Read Work, Study Trials

OTTAWA-Critics of Linus Pauling's views on vitamin C and the common cold would do well both to read his work thoroughly and to study the available trials on the effects of ascorbic acid in reducing the incidence and severity of the ailment in subjects exposed to the cold virus in the usual way, Dr. R. M. Preshaw, of the Department of Physiology at the University of Toronto, suggested in an editorial in the Canadian Medical Association Journal.

When Dr. Pauling's Vitamin C and the Common Cold appeared last year in paperback, he noted, "it was treated rather harshly by most of the reviewers in the medical press."

"Secure in the knowledge that vitamin C had been unsuccessfully put forward as therapy more than two decades ago for lantly complained about the scarcity of experimental support for Pauling's theo-

ries," Dr. Preshaw wrote. Parenthetically, he remarked that "the good professor struck back with several devastating replies to reviewers whose comments had contained more fancy than

Those who "took time out from the fray" to read Dr. Pauling's paperback thoroughly, he said, "were impressed by a lucid and reasonable argument, contained in a monograph which might serve as a model for elementary instruction in scientific matters."

Dr. Pauling had relied, Dr. Preshaw pointed out, on four independent doubleblind studies on the effects of regular in-

than 100 mg. daily, in comparison with a placebo, in reducing the incidence and morbidity of the common cold.

The latest study, by Anderson, Reid, and Beaton (see page 1), Dr. Preshaw noted, is a fifth randomized clinical trial, one using the larger dosages recommended by Dr. Pauling. A significant finding. he emphasized, was the difference in the number of subjects who remained free of illness throughout the period of study-18 per cent of the placebo group against 26 per cent of those taking ascorbic acid.

Small-Dose Trials Published

Dr. Preshaw observed that several "acceptable" trials of much smaller doses have been published. "The results," he commented, "may be interpreted as scoreverything from cervical erosions to auto- lng two in favor and three against the promobile accidents, the brave critics petu- posal that ascorbic acid in these doses is useful therapy for colds." The failure of vitamin C (3 Gm. per day) to alleviate the miseries of the common cold in a trial by a group of general practitioners in England, he continued, "would seem to tip the scales further against the value of ascorbic acid."

> But the study by G. Ritzel, conducted at a skl school in Switzerland, and now the study by Dr. T. W. Anderson and his colleagues, indicating that larger doses are of value in the therapy of upper respiratory infections, "return the scale to balance."

> Furthermore, he added, Dr. Anderson's group reported "that subjects receiving ascorbic acid were confined to the house with nonrespiratory ailments significantly

Microbiologist Throws Light On Flu Vaccine

NEW YORK - In order to throw more ligh on the continuing controversy over the influenza vaccine, the most promising new lines of research into providing immunization, and the degree of vulnerability in the United States in the case of an influenza outbreak this winter, MEDICAL TRIBUNE interviewed Dr. Edwin T. Kilbourne, Professor of Microbiology and chairman of the department at Mount Sinai School of Medicine. Dr. Kilbourne is a leading researcher in the development of the current influenza vaccine.

Could you explain what "recombina

All influenza A viruses-and these are the ones we are chiefly concerned with as far as causing disease in man-can partici-

pate in a genetic interchange. "Recombination" represents this genetic interaction between related but somewhat dissimilar influenza viruses, Induced in the laboratory, recombination takes advantage of this genetic lability of the virus,

in order to harness it

for human purposes; instead of empirically selecting viral strains for use in a vaccine, we try to tailor-make the strains we want. Since the influenza virus keeps mutating (the magnitude of which is a characteristic in contrast to all other infectious diseases), we have the unique problem of having to create, every few years, a new vaccine that antigenically matches the influenza virus each time it changes. Recombination thus has involved combining the specific antigenicity of a new strain with the ideal growth characteristics of another strain, which makes production of a vaccine economically feasible.

The actual mechanism of recombin tion is quite simple. It's brought about by the simultaneous infection of chick embryos or tissue cultures with the viruses we wish to use as parents, and from the mixed yield of such an infection we screen out by various selective methods the strain that meets the desired specifications.

I'd like to point out that most of the vaccines currently used in this country involve the use of such a recombined virus that we developed, the X-31. I believe that, currently, four out of the six American manufacturers are using the X-31 (Hong Kong) strain as their vaccine.

Does the new "England strain" recently isolated represent a major change in antigenicity from the Hong Kong strain, and thus does it threaten the United States this

Although this is the biggest change we've had in this post-Hong Kong period, it still could not be called a "major change." It's nothing like the change, for example, from Asian to Hong Kong; it is enough of a change, however, to probably compromise existing immunity to some extent. It therefore will be a threat to the United States, particularly to those parts of the country that have not had recent experience with the Hong Kong strain. I would suspect that the England strain is close enough to the original Hong Kong strain so that vaccination with present vaccines would probably be effective, although somewhat less effective than it would be against the Hong Kong strain. The present vaccine, which is the Hong Kong variety, is definitely worth using.

Conclusion in Next Issue of Medical Tribune